VALENCY OF THE KIKAMBA VERB

BY

BRENDA M. WAMBUA

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DEPARTMENT OF ENGLISH & LINGUISTICS
KENYATTA UNIVERSITY
NAIROBI

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This thesis is my original work and has not been presented for examination in any other University.

[Signature]

BRENDA M. WAMBUA

20th August 2001

DATE

This thesis has been submitted with our approval as university supervisors.

[Signature]

DR. ANGELINA KIOKO

21st August 2001

DATE

DEPARTMENT OF ENGLISH

KENYATTA UNIVERSITY

NAIROBI.

[Signature]

DR. TOM ONDITI

20th August 2001

DATE

DEPARTMENT OF ENGLISH

KENYATTA UNIVERSITY

NAIROBI.
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DEDICATION

This thesis is dedicated to my beloved parents Mr. Stephen W. Mbae and Agnes M. Wambua who educated me and have always encouraged me to pursue further studies.

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Sincere gratitude to my colleagues Dolly, Bariyo, Geoffrey and others for their company and exchange of ideas.

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DEFINITION OF TERMS

1. Applicative Morpheme:
   A derivational affix whose function is to signal the presence of an NP which is not part of the basic subcategorization of the verb. The NP indicates to whom the verbal process applies, or in whose favour or on whose behalf/ in which place/ for what, action takes place.

2. Causative Morpheme:
   A derivational affix that can attach virtually to any verb that has at least one argument giving it the meaning of causing someone to do or making someone else do something.

3. Passive Morpheme:
   A derivational affix which is typically present in all verbs that are in the passive voice whose function is to give prominence to the action rather than the doer or the agent.

4. Stative Morpheme:
   A derivational affix that denotes the potentiality of the subject to
undergo a particular process, the practicability of a particular event or
the state of a particular event.

5. Zero-Valent Verbs:
Verbs which do not have true verb elaborators. They do not even have
a valency subject. The structural pattern of such verbs would be:
Valency structure 0: 0+V where 0 represents the empty subject, and
V stands for the verb. These are usually meteorological verbs like: rain,
drizzle, snow, freeze and pour.

6. Monovalent Verbs:
Intransitive verbs with a single elaborator which is either the subject or
the object.

7. Divalent Verbs:
These are generally transitive verbs of the structure Subject + V +
Object.
8. Trivalent Verbs:
Verbs which have a subject plus two other elaborators.
For example, Peter gave Mary a present.

9. Tetravalent Verbs:
The verbs which have a subject and three other elaborators. This could occur on the structure Subject + V + Object + Object + Objoid.

10. Pentavalent verbs:
The verbs which have the subject and four other elaborators. This could occur in the structure: Subject + V + Object + Object + Locative (basic) + Objoid

11. Hexavalent verbs:
Verbs with the subject and five other elaborators and these verbs occur in valency structures like:
Subject + V + Object + Object + Object + Objoid + Objoid.

12. Objoid:
Verb elaborators which are object-like but are not passivizable e.g.
Peter became a thief.
13. Valency Structures: (Sets):

Structural pattern of a sentence in which all its constituents are displayed. For example, the valency set of a transitive verb is: Subject + Verb + Object.

14. Locative:

A noun phrase (which is either basic or derived) which states where an action took place. For example,

Műení akûn-î-a kana nyûmba.
Műení beat-APP child house.
Műení has beaten the child while in the house.
ABBREVIATIONS

1. NP: Noun phrase
2. V: Verb
3. SVO: Subject + Verb + Object
4. APP: Applicative
5. CAUS: Causative
6. PASS: Passive
7. STV: Stative
8. NEG: Negative
9. VP: Verb Phrase
10. PP: Prepositional Phrase
11. FV: Final Vowel
This study is an investigation into the valency of the Kikamba verb. The idea of valency is based on the concept of the centrality of the verb in all natural languages. The study examined the valency of both the basic and derived verbs. The valency of a particular verb was determined by describing the valency structure each verb fits in. The verbs used in this study were gathered from a Kikamba story book and the Kikamba bible. Using native speaker intuition, the researcher constructed sentences using the verbs and made use of the method of describing valency structures used in Allerton (1932) for the analysis of data.

Our analysis of the data revealed that the valency of the basic verb is closely related to its transitivity such that one can predict the valency of a particular verb on the basis of its transitivity status. Hence "weather verbs", verbs with no elaborator are zero-valent while intransitive verbs are monovalent. Monotransitive verbs are divalent whereas ditransitive verbs are tetravalent. Derived verbs with the applicative or the causative affixes are one valency higher than the basic verb while the stative and the
passive derived verbs are one valency lower than the basic verb. It was also noted that the valency increasing affixes can occur together in one verb while the valency reducing affixes cannot. As such, the valency of the Kikamba verb can be increased twice but cannot be reduced twice even when the basic valency is three.

Of the four affixes used in our study, only the applied affix can double or even treble on one verb. Though double causation can be expressed in Kikamba, this is done by use of bi-clausal structures. We also noted that when a basic intransitive verb with an optional locative NP is derived using the valency increasing affixes, the locative NP becomes obligatory. Basic zero-valent verbs in Kikamba do not pattern with the valency reducing affixes since verb valency cannot be reduced below zero. The zero-valent verbs, however, can take two applied affixes and the resulting derived verb is accompanied by a cognate elaborator in the subject position which becomes obligatory when the verb is derived. Finally, we observed that the stative affix is the most restricted of the affixes examined, it only occurs with verbs that have at least two elaborators.
The study is divided into five chapters. Chapter one provides background information on the concept of valency, states the problem and outlines the research design and the theoretical framework used in this study. Chapter two is an examination of related literature both in English and Kikamba. Chapter three describes the valency of the basic verb while chapter four tackles the valency of the derived verb. Chapter five includes a summary of our findings and conclusions.
CHAPTER ONE

1.0 Background to the Study

Valency is a scientific term mainly used in chemistry to describe how the atoms of different elements combine to form chemical compounds. For example, sodium which is monovalent (bearing valency one) needs to be united with another monovalent element like hydrogen while oxygen which is divalent (bearing valency two) requires two hydrogen elements to make its valency complete, Allerton (1982).

The term valency was adapted into linguistics by Tesniere (1953, 1959) to describe the way in which a verb combines with other constituents in a sentence. In linguistics, valency can be defined as 'the ability of the verb to have empty positions in the sentence which are filled by specific semantically or morphologically defined classes of linguistic units' Graustein et al (1977:113). Grausstein et al (ibid) further stress that valency is of special importance because it influences structures both inside the verb such as affixes and outside the verb such as complements. Tesniere (1953,1959) sees the verb as the item that governs the rest of the sentence and the one on which the
rest of the sentence depends. In other words, the verb is a pivot around which all other elements turn. These other elements, according to Matthews (1981), may be referred to as dependants. They include subjects, objects, adjuncts, complements, prepositional phrases, and finite clauses among others. In some structures, some of these other elements may be obligatory while others may be optional. For example, in structures where the verb is transitive the direct object will be obligatory.

In our study, we seek to determine the number of obligatory elaborators different Kikamba verbs govern in clause structure. We work closely with transitivity since it is related with valency. According to Quirk and Greenbaum (1973), transitivity deals with units which complement the verb and which are in general obligatory in clause structure. A verb is said to be transitive if it takes a direct object and to be intransitive if it does not take a direct object. Valency goes a step further than transitivity since it deals with subjects, objects and all other obligatory complements that surround a verb. Lyons (1977) says that the concept of valency can be seen as far as its ancestry within linguistics is concerned, as something, which takes
Paul (1994) points out that, traditionally, a distinction had been made between those verbs representing an action as passing 'from one entity to another' and those where such a transiting of the action does not take place. The two types of the verbs were referred to as transitive and intransitive though sometimes it is not easy to define whether a verb should be one or the other. Verb valency was therefore proposed as a more adequate way of classifying verbs since it classifies verbs according to the morphosyntactic pattern each verb imposes on the other word categories it attracts to its orbit.

The verb in Kikamba, like in many Bantu languages takes many affixes. Some of them are inflectional, for example, tense, agreement and aspect while others such as, the causative and the applicative are derivational. Thus the Kikamba verbal morphology is complex. As analyzed in Kioko (1994) the verb comprises a verb root (usually called the verb radical in Bantu studies), one or more prefixes and one or more suffixes.
The verb root is what remains when a verb has been stripped of all inflectional and derivational affixes. The verb root can be followed by one or more derivational suffixes generally known as verbal extensions. In summary the morphology of the verb in Kikamba can be presented as below.

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Fig 1. Adapted from Kioko (1994:61)

For more details on the Kikamba verbal morphology see Kioko (1994:38-61)

The valency of a verb can either be increased or decreased by use of affixes. The valency reduces when a valency reducing affix is used in the verb while it increases when a valency increasing affix is used. The change is indicated by the absence or presence of a new elaborator in the sentence where the derived verb occurs. In order to examine how the valency reducing morphology and the valency
increasing morphology affect the verb; we use four valency changing morphemes in Kikamba. These are: the causative morpheme -ethy-/thy-, the passive -w-, the applicative -e- /-í-, and the stative -ek-/ík, Kioko (1994). The causative and the applicative affixes are valency increasing while the stative and the passive are valency reducing. This study examines the valency of both basic and derived verbs.

Several studies have been carried out on the Bantu verb but none to our knowledge has addressed the valency of the Kikamba verb. Most of the studies, (as noted in the literature review) e.g. Njoroge (1978), Gatherenji (1981), Kioko (Ibid), Kioko (1995), Kioko (1998), deal with the verbal affixes in relation to syntactic structure. None of the studies has related the verbal affixes directly to valency hence we felt that this study will make a remarkable contribution to knowledge in the field of descriptive linguistics.
1.1 Statement of the Problem

This study is an investigation into the valency of the Kikamba verb. The verb is the central element in all natural languages and it attracts other clause constituents into its orbit. The constituents may be obligatory or optional, hence we seek to establish the number of elaborators the Kikamba verb governs in clause structure as well as the valency structures that exist in Kikamba, for example, monovalent structures, divalent structures, tetravalent structures, among others.

Since, as earlier noted, valency is a development on transitivity, this study explains how the transitivity of the Kikamba verb relates to the valency of the same. In this light, we also focus on the semantic relationship between the verb and its complements.

This study also examines four derivational affixes which affect the valency of the verb by either reducing it or increasing it. These affixes are used in order to find out the way they pattern with the various basic verbs. Two of the affixes are valency reducing while the other two are valency increasing. Each of these affixes is used with the basic verbs to determine the valency of the derived verbs. The affixes
are doubled as well as used together in one verb. After exploring the effect of these affixes on the basic verb, we compare the valency of the basic verbs and that of the derived verbs.

1.2 Research Questions

This study sought to answer the following questions:

1. What verb valency structures exist in Kikamba?
2. To what extent does the transitivity of the Kikamba verb relate to the valency of the same?
3. What changes result from the use of valency changing morphemes on the Kikamba basic verbs?
4. Which derivational affixes can double or co-occur in one verb and what is the effect of the doubling and co-occurrence on the valency of the basic verb?
5. What similarities/differences exist between the valency of the basic verbs and that of the derived verbs?

1.3 Objectives of the Study

The following were the objectives of this study:

1. To identify the verb valency structures that exist in Kikamba.
2. To investigate the extent to which the transitivity of the Kikamba verb relates to the valency of the same.

3. To describe the effect of valency changing morphemes on the valency of the Kikamba basic verb types.

4. To identify the derivational affixes that can co-occur or double in one verb and describe their effect on the valency of the basic verb.

5. To compare the valency of the basic verbs and that of the derived verbs.

1.4 Research Assumptions

This study had assumed that:

1. The Kikamba verb governs a wide range of elements in clause structure.

2. The transitivity of the Kikamba verb affects the valency of the same.

3. Derivational affixes in Kikamba affect the valency of the verb by either reducing or increasing it.

4. Some derivational affixes in Kikamba can double or occur together in one verb.

5. There is a significant difference between the valency of basic verbs and that of derived verbs.
1.5 Rationale of the Study

This study aims at descriptively analysing the valency of the Kikamba verb. Most of the studies on verb valency have dealt with the English verb while this study focuses on Kikamba, which is a Bantu language. Hence it widens the scope of verb valency studies by relating it to a language other than English. This study would also be useful for contrastive studies in second language learning. A researcher interested in carrying out research on contrastive studies could use the findings of this study as relevant reference for their study.

Further, the data collected in this study, which comprises verbs, forms useful corpora for further research on the verb in Bantu languages. An appendix of the verb roots used is provided at the end of the study.

1.6 Scope and Limitations

This study, which is an investigation of the valency of the Kikamba verb, focuses on Kikamba language. Although related studies on the English verb have been carried out, they served as a guide in assisting in the study of the Kikamba verb.
the researcher on how to go about the study and also acted as a source for the model used for our data analysis.

According to Graustein et al. (1977:38) 'Valency is not limited to the verb'. Valency can also be used to indicate the partners of a noun e.g. determiners: 'every girl' and the partners of adjectives e.g. 'rather boring'. The preposition also has its valency defined e.g. Peter travelled to Australia. Although the valency of these other sentence structures is equally important, our study only focuses on verb valency since the verb is the central element in all natural languages.

Although the major interest of this study is the Kikamba verb, it does not discuss the general aspects of the verbal morphology in Kikamba like Tense and Aspect in detail. For our purposes the statement made in Kioko (1994) will suffice.

For our data collection purposes, we used written texts as our source. The texts include the Kikamba Bible and a Kikamba story book ‘Katheea Kuma Yayani Ngotho’ (1989). Since the Bible was written at an earlier time and the story book at a later time, the story book acts
as a form of control just in case some verb has changed in terms of valency. Further, a Kikamba-English dictionary, which would have been an ideal source of verb data, was not available. This study could also have made use of spontaneous conversation but this would not have given us different types of verbs because the topic of discussion may limit the conversation to particular verbs. In addition, the process of tape recording and transcribing the data would be unnecessarily involving without any added benefit to our study.

In order to determine the effects of derivational affixes on verb valency, four valency changing morphemes were selected: the passive, the stative, the causative and applicative. These morphemes are the ones more commonly used in both the spoken and the written Kikamba.

Although very little study has been done on the stative and the causative, this study does not go into the details of their morphologysince it is outside our scope. A lot has been done on the passive and the applicative, for example, Dubinsky and Simango
(1996) and Kioko (1995) but this study gives additional details on the same concerning their effect on the valency of the Kikamba verb.

1.7 Theoretical Framework

This study could have made use of Chomsky's Transformational Generative Grammar theory, specifically the sub-categorization frames, which are a feature in the Extended Standard Theory as indicated in Radford (1981). Radford (Ibid) states that a subcategorization frame specifies the range of complements a given verb is subcategorized as permitting within the VP. These frames are a feature in the lexicon. A general rule of sub-categorization states that a verb is positively specified with respect to the contextual features associated with the context in which it occurs. Thus transitive verbs are positively specified for the contextual feature + [-NP], intransitive verbs -[-NP] while those verbs that are used both transitively and intransitively are specified as ±[-NP].

For instance,

(3) (a) **andika** (write): \( V, + [-NP] \) - (Transitive)
(b) **semba** (run): \( V, - [-NP] \) - (Intransitive)
(c) **viuga** (close): \( V, \pm [-NP] \) - (Transitive\|Intransitive).
This model, however, has the following limitations:

(i) The sub-categorization frames are determined by the valency of the verb but not vice versa.

(ii) The model cannot be used to analyse derived verbs and this study deals with both basic and derived verbs.

Due to these limitations this study made use of Allerton's model of analysing valency structures outlined in Allerton (1982). In his discussion on valency and the English verb, Allerton sought to establish the number of participants that accompany the verb in a clause. He used the term 'elaborator' to refer to the obligatory elements that accompany the verbs. According to Allerton, elaborators simply refer to the participants in the verbal process or state. These include subjects, objects, objoids, prepositional phrases, adverbials and predicatives. The terminology developed in Allerton (1982) to refer to elaborators fully accounts for the types of elaborators found in English.

In his model, Allerton used numbers to identify different elaborators. Using these numbers he described the valency structure of each
construction hence making it easy to determine the valency of the verb. Below is an outline of the numbers used by Allerton and the elaborators they represent.

1 - subject.

2 - object (both direct and indirect).

2X - oblique object.

3 - objoid (both direct and indirect).

4N - predicative noun.

4A - predicative adjective.

4X - as predicative.

5 - prepositional object.

6 - prepositional objoid.

7 - adverbial elaborator.

8 - adverb limiter.

The symbol Ø was used to stand for an empty subject.

Allerton’s model is developed to analyse the valency of the English verb as shown below:

(4) Fido suffered from headaches.

This structural pattern is described as:

Valency structure 16: Subject + V + Prepositional Objoid.
Meaning a valency structure that has elaborator 1 and elaborator 6.
The verb is divalent or $V^2$ implying that it has two elaborators.

(5) Fido paid me a large sum for the article.

This structural pattern is described as:

Valency structure 1226: Subject + V + Indirect Object + Object + Prepositional Objoid.

A valency structure which has elaborators 1, 2, 2 and 6.
The verb is tetravalent or $V^4$ implying that it has four elaborators.
Examples (4 and 5) are adapted from Allerton (1982:145).

Allerton uses terms such as zero-valent ($V^0$), monovalent ($V^1$),
divalent ($V^2$), trivalent ($V^3$) and tetravalent ($V^4$) to describe the
valency of the English verb.

In this study, we adapted Allerton's model to suit our purposes. For
instance, the elaborators numbered 2X, 4X, 5-8 are not obligatory in
Kikamba hence we replaced them with the obligatory elaborators that
were not included in numbers 1, 2, 3, 4N and 4A. Below is an outline
of the adapted model that was used for our analysis.
As noted above, for elaborators 2 and 3, Allerton specifies whether they are direct or indirect objects and objoids respectively. In this study we do not specify either the direct and indirect objects or the direct and indirect objoids because studies in Bantu linguistics such as Kioko (1998) state that the object position in Bantu can be occupied by a series of nominals without any intervening prepositions. Secondly, the major concern of this study was to determine the number of elaborators that accompany the verb in a clause. The objoid position in Kikamba is mainly occupied by NPs introduced by the derived verbs such as the locative NP and the motive\reason NP. These NPs have been considered as objoids because they are object-like but not passivizable. (c.f Kioko (1994)).
Using the numbers for the different elaborators as shown above the valency structures of different verbs were established and the valency of the basic and derived verbs determined as shown in examples (6) to (8) below.

(6) Mwalimu nīwaandīka valuā.
   Teacher write letter.
   The teacher has written a letter.

This structural pattern is described as:

Valency structure 12: Subject + V + Object.

The verb is divalent or V².

When the basic verb is derived using an applicative affix, one more elaborator is added to the clause hence increasing the valency of the verb by one as shown in (7) below.

(7) Mwalimu nīwaandīk-a valuā sukuulu.
    Teacher write - APP-FV letter school.
    The teacher has written a letter while at school.

This structural pattern is described as:

Valency structure 123: Subject + V + Object + Objoid (Derived Locative NP).

The verb is trivalent or V³. The new elaborator sukuulu `school' is a derived locative NP and it is an objoid. The derived verb in (7) above
cannot be used without the additional elaborator. When the passive affix is used with the basic verb one elaborator (the agent) is left out, hence the valency of the verb is reduced by one, as shown in (8) below.

(8) Valiňa nĩ waandĩk-w-a (nĩ mwaliminũ).
Letter write -PASS-FV (by teacher) 
A letter has been written (by the teacher).

In this study we adapted Allerton’s terms of describing verb valency by using others such as pentavalent \( V^5 \) and hexavalent \( V^6 \).

1.8. RESEARCH DESIGN

1.8.1 Data and Data Collection

The data needed for this study constitutes verbs. For our purposes we used verb roots. The verb root, (usually called the verb radical in Bantu studies) as mentioned in section 1.0 is what remains when all affixes, whether derivational or inflectional, have been removed as said in Bauer (1993).?

The verbs needed for this study were obtained from written texts.

Although linguistic research allows a native speaker’s generation of
data, we felt that the written texts would give us adequate data that is devoid of any generalizations. The texts included the Kikamba Bible and a Kikamba story book as mentioned earlier in section 1.6. The Bible having been written during the period of missionaries in Kenya (i.e. in the 1880s), displays an earlier version of the language while the story book, which was written in 1989, uses a later version. Although, this was not part of the key interests of our study, the use of the Bible and a story book written at a later date acted as a form of control just in case some verb had changed over time in terms of valency.

These texts were selected in the absence of a Kikamba – English dictionary which would have been an ideal source of verb data.

As indicated above, our key data constituted verbs and our interest was not the meaning of these verbs but the number of obligatory participants one would need to construct grammatical sentences using those verbs. This is a grammatical feature that has not been observed to change with time and it is held constant even in translated works. As such, our data could derive from an oral or written source without
affecting the results of our study. The use of oral sources, however, would involve a lot of unnecessary tasks without any added benefit since we would need to tape record a lot of material from varieties of style to get a variety of verbs. This data would then need to be transcribed and the verbs identified. We thus opted to use written texts as noted earlier in section 1.6. The choice of the Bible, in addition to the story book, is therefore, based on the fact that the Bible has a variety of books that are written in different styles. These styles are; narrative style, poetic style and letter writing style hence we were assured of a variety of verbs. However, the style has no effect on the valency of the verb.

In addition to the verbs, this study also made use of four derivational affixes, which are valency changing morphemes: the causative, the applicative, the stative and the passive. Two of these are valency reducing while the other two are valency increasing.

As noted earlier, these four morphemes were chosen because they are more common than other derivational affixes in both spoken and written Kikamba.
The Kikamba story book is thirty-five pages long and it was read and all the verbs in it underlined and listed down. Each verb was recorded at its first occurrence. Since we could not read the whole Bible for the purposes of this study, we selected three sections: the first five books of the Bible which are historical, the Poetic books e.g. Psalms and Proverbs and the epistles in the New Testament. The three sections were chosen in order to give us a variety of verbs since they are written in different styles. The historical books are written in narrative style, so the Prophetic books and the Gospels were left out because they are narrative just like the historical books. Using the systematic sampling method described in Peter (1994), two chapters of the Bible were selected from each section. The total number of chapters in each section was determined and then divided by two to get the sampling figure. For example, the chapters in the Epistles were 112, so we divided by 2 i.e. 112/2=56 and then every 56th item was picked i.e the 56th and the 112th chapters.

To get the number of verbs needed for our study, 100 verbs were picked from the Bible and 100 from the story book. This was done by using the systematic sampling method of picking the kth item. For
example the verbs from the story book were 216, so we divided this by 100 i.e. $\frac{216}{100} = 2.16$ and then we picked every 2$^{nd}$ verb until we got 100 verbs. The verbs from the Bible were 201, so likewise we divided by 100 i.e. $\frac{201}{100} = 2.01$ and we picked every 2$^{nd}$ verb and we got 100 verbs from each text. The 200 verbs were classified into 3 categories i.e. transitive, intransitive and those that can be used both transitively and in transitively depending on how they are used in the text or by constructing sentences of our own. On categorizing we got 133 transitive verbs, 55 intransitive and 12 verbs that can be used both transitively and in transitively.

Table 1 below shows the number and percentage of the verbs per category.

**TABLE 1: Number and Percentage of Verbs Per Category.**

<table>
<thead>
<tr>
<th>CATEGORY OF VERBS</th>
<th>NUMBER OF VERBS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive</td>
<td>133</td>
<td>67</td>
</tr>
<tr>
<td>Intransitive</td>
<td>55</td>
<td>27</td>
</tr>
<tr>
<td>Transitive/Intransitive</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>
From table 1 above, we noted that a majority of the verbs in Kikamba are transitive. On classifying, we sampled the verbs in each category to get 10 verbs per category. The verbs were then stripped of all affixes to give us the required verb roots. Using the basic forms of the verbs we constructed sentences which formed part I of our data. One sentence per verb was not adequate for our analysis, so we constructed as many sentences of different valencies as the verb permitted. Occasionally verbs that were not in the sample were used for additional information.

For part II of our data, we used the same sampling method once more, to pick 5 verbs from each category. This gave us a total of 15 verbs. We then used each of the verbs with the derivational affixes giving us a total of 20 derived verbs per category. Since this could have given us too wide a scope of data for our study to handle, we sampled the verbs once again to get 10 verbs per category which gave a total of 30 verbs. The 30 verbs were used to construct sentences, which formed part II of our data. Since one sentence per verb could not give us adequate data, using these verbs, we constructed as many sentences of different valencies as the verb could allow.
The researcher constructed the sentences needed for this study since linguistic research, as is evident in Chomsky (1965) and Radford (1981, 1988) recognizes a native speaker's intuition in generating data. This method of data collection has successfully been used before e.g. Kioko (1994), Gathenji (1981). Moreover, according to Radford (1981, 1988), Chomsky is of the view that a native speaker's competence is what makes the grammar of a language. In the light of the above, the researcher who is a native speaker of Kikamba generated the sentences and counter checked with other native speakers in cases of doubt.

1.8.2 Data Analysis

For our analysis, we used both the data for part I and the data for part II. To determine the valency structure each verb fitted in, sentences were constructed using each of the 10 verbs in each category. On examining the possibilities of different structures for each verb, the valency structure was extracted. The sentences used here were constructed by the researcher and they were phrased and rephrased in order to determine the obligatory elements. Valency was therefore
determined by examining the number of participants each verb takes as in (9) below.

(9)  
(a)  Mwalimū nīwakūna kana.  
Teacher beat child.  
The teacher has beaten a child.  

(b) *Mwalimū nīwakūna.  

The structural pattern in 9 (a) above is described as:
Valency Structure 12: Subject + V + Object.

The basic verb is divalent or V².

9(b) above is ill-formed because only one elaborator is used in a verb that needs two.

Having determined the valency of the basic verb, the valency structures that the derived verbs occurred in were also described hence their valency determined as in (10) below.

(10)  Kana nīkakūn-w-a.  
Child beat- PASS-FV.  
The child has been beaten.

The pattern can be described as:

Valency Structure 1: Subject + V.  
The derived verb is monovalent or V¹.
The passive, being a valency reducing morpheme, reduces the valency of the basic verb *kuna* ‘beat’ which we had shown in 9 (a) above as divalent, to monovalent as shown in (10) above.

The causative morpheme, which is valency increasing, increases the valency of the basic verb by one as shown in (11) below.

(11) Mûnene nîwakûn-îthy-a Mwalimu kana.
    Boss beat- CAUS-FV teacher child.
    The boss has made the teacher beat the child.

The structural pattern is described as:

Valency Structure 122: Subject + V + Object + Object.

The derived causative verb is trivalent or $V^3$.

The basic verbs were derived both singly and multiply. Examples of single derivation are (10) and (11) above. Multiple derivation occurs when an affix is doubled, trebled or co-occurs with another type of derivational affix. The valency of the multiply derived verbs was also determined by first describing the valency structures they occur in as shown in (12) below.

(12) Mwalimu nîwakûn-îthw'-a kana.
    Teacher beat - CAUS-PASS-FV child.
    The teacher has been made to beat the child.
The structural pattern can be described as:

Valency Structure 12: Subject + V + Object.

The derived verb is divalent or V

As observed in (12) above, when the causative and the passive affixes co-occur the valency of the derived verb is the same as the valency of the basic verb. This is so because the causative affix increases the elaborators by one and the passive affix reduces by one.

After determining the valency of the verbs, both basic and derived, the information was presented in tables. Below is a sample of the tables used to present the observations.

**TABLE 2: A Sample Table: Verb Categories and Valency of the Basic and Causative Derived Verbs.**

<table>
<thead>
<tr>
<th>VERB CATEGORIES</th>
<th>VALENCY OF THE BASIC VERB</th>
<th>VALENCY OF CAUSATIVE DERIVED VERB</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZERO-VALENT</td>
<td>Zerovalent</td>
<td>-</td>
</tr>
<tr>
<td>INTRANSITIVE</td>
<td>Monovalent/Divalent</td>
<td>Divalent/Trivalent</td>
</tr>
<tr>
<td>INTRANSITIVE\</td>
<td>Monovalent/Divalent</td>
<td>Divalent/Trivalent</td>
</tr>
<tr>
<td>TRANSITIVE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MONOTRANSITIVE</td>
<td>Divalent</td>
<td>Trivalent</td>
</tr>
<tr>
<td>DITRANSITIVE</td>
<td>Trivalent</td>
<td>Tetravalent</td>
</tr>
</tbody>
</table>
1.9 Conclusion

Chapter one basically forms an introduction to this study. In chapter two, review of related literature is presented, chapter 3 and 4 outline the analysis and presentation of our data while the last chapter gives the findings and conclusions.

2. Related Studies in English

A number of researchers have discussed valency of the verb in English.

Some of them have focused on verb valency in a chapter or section of a book, whereas others go into much more detail in the book. Consequently, the amount of the book devoted to the valency of the verb varies radically.

For example, the discussion of transitivity begins in chapter 2 of my book, but the detailed analysis of the verb's transitivity is spread throughout the book. As a result, the reader has the opportunity to see the verb's transitivity in use throughout the book.
CHAPTER TWO

LITERATURE REVIEW

2.0 introduction

In this chapter, literature related to verb valency has been reviewed. The chapter is divided into four sub-sections. In the first sub-section literature on related studies in English is reviewed. The second sub-section addresses itself to general studies in Kikamba. The chapter ends with a review of studies on the Bantu verb and studies on the Kikamba verb.

2.1 Related Studies in English

A number of linguists have discussed valency of the verb in English. Some of them, however, discuss verb valency in a chapter or section of a book while others like Allerton (1982) and Omasaja (1987) discuss the valency of the English verb at length.

Lyons (1977) discusses verb valency in relation to transitivity briefly. He points out that valency takes over from and extends the more traditional and restricted notions of transitivity and government. He,
However, does not give details of how valency extends the two notions. He also mentions the valency increasing and valency decreasing mechanisms and refers to the passive, as a valency reducing mechanism while the causative is a valency increasing mechanism. Our study, being an investigation into the valency of the Kikamba verb goes a step further from this study and shows how valency develop transitivity. We also briefly describe the valency changing morphemes and their effects on the valency of the verb. These valency changing morphemes are: the passive, the stative, the causative, and the applicative.

Matthews (1981) observes rather briefly that many elements in syntactic constructions are described in terms of dependency of one element on another. He adds that the verb is said to govern its object such that in 'Leave the meat in the kitchen' the noun 'Meat' is seen as subordinate to or governed by the verb 'leave'. Our study made an exploration of the number of arguments the verb attracts to the clause.

Allerton (1982) is a detailed study on verb valency since it tackles the issue on the syntactic structure of the clause, the functional relations of
sentence constituents, the problems of verb valency, verb valency structures and on a wider perspective, the English verb valency. In determining the verb valency structures a particular verb occurs in, Allerton uses a model of identifying the different elaborators using numbers (cf. section 1.7). This makes it easy for the researcher to determine the valency of the different verbs. This study has implications on our study, since we analyse the valency of the Kikamba verb by determining the verb valency structures each verb fits in. Our study uses the model of analysis used by Allerton. However, the two studies differ, not only in the languages used but also in that while Allerton tackles the functional relations of the constituents, problems of verb valency and syntactic structure of the clause, our study determines the number of obligatory elaborators that accompany Kikamba verbs in a clause.

Though Brown (1984) does not make explicit mention of verb valency, he discusses syntactic structures in functional relationships. These relationships, between the verb and the various NPs and other constituents in the sentence, can be looked at by way of two
approaches to description; one describing the various relations established with labels like 'agent' and 'patient' and the other with labels like 'subject' and 'object'. He further notes that the most important sets of functional relationships to be found in any Language are those between a verb and the various NP and PP constituents with which it co-occurs. This study fills in the gaps in the above work since in addition to the syntactic relations, our study puts into consideration the semantic relations between the verb and its complements.

Omasaja (1987), discusses the English verb valency in relation to the role of the verb as the central element in clause structure, functional relations, and the different verb valency structures in English. Omasaja (1987) uses the model of analysis used in Allerton (1982) and so it has implications on our study. Our study touches on some of the issues discussed in his study but with reference to the Kikamba verb.

Paul (1994) discusses valency on a broad perspective. He says that valency is not independent of meaning. As one examines the valency of the verb, he adds, the relationship in meaning between the verb and its
complements must be established. The factors that influence the realization of valency (e.g. the passive) are issues of importance in his paper. Our study, to some extent focuses on the relationship in meaning between the Kikamba verb and its complements as well as the changes on this relationship brought about by the presence of various valency affecting affixes.

2.2 General Studies in Kikamba

Some studies on Kikamba generally deal with the language as a whole and lack any specific details. For example, Farnsworth (1957) and Muli and Whiteley (1962). The former is rather basic since it merely gives a list of words, phrases and sentences together with their English translation while the latter simply outlines the various categories of the noun, the verb, and the adjective. These two studies aim at meeting the linguistic needs of non-Kikamba speakers.

Other studies on Kikamba however, are more specific and have some or no implications on our study. Maundu (1980) concerns himself with the phonology of Kikamba. He attempts to reconstruct an earlier
system of the consonantal sounds that gave rise to the present day Kikamba consonants. This study does not touch on verb complementation, which is our area of concern.

Mutisya (1986) gives a systematic analysis of concord in Kikamba and Kiswahili. Her major concern is basically the Noun class. To some extent, her work can be categorized as morphological. Such a study differs from our study in that it deals with the noun while our area of interest is the verb.

Mwove (1987) analyses the syntactic structure of the Kikamba Noun Phrase. She discusses the various NP positions in the sentence as well as movement rules that may apply to move NPs from their base generated positions. This study gives insight to our study since it deals with the structure of Kikamba NP and our study considers the number of NPs that accompany a verb in clause construction.
2.3 Studies on the Bantu Verb

Several studies have been done on the Bantu verb but with specific reference to different Bantu languages. For our purposes we shall review only those that relate to our study.

Njoroge (1978) deals with Gikuyu deverbatives (i.e. the derivation of nouns from verbs) and other nominalizations through affixation. He argues that though nominalization may be done through other ways, affixation is the commonest. He places the resultant nouns into various categories e.g. Agentive, Instrumental and Abstract ones. This study has some relevance to our study in that it touches on affixation which also features in our study, but in our case we consider its effect on the valency of the Kikamba verb.

Gathenji (1981) concerns herself with the morphology of verbal extensions in Gikuyu. She analyses the verbal extensions (suffixes) of various morphological categories extensively. She also discusses the meaning associated with each, for example, stative, applicative, causative, reversive, reciprocal etc. In addition, she looks at the
syntactic implications of suffixation, noting that some of the morphemes, for example, the causative can convert an intransitive verb to a transitive one. This study has a lot of relevance to our study because we also consider the morphology of the verb briefly and take note of the effect of four of the affixes on the valency of the Kikamba verb.

Matsinhe (1993) with reference to Tsonga, (a Bantu language spoken in Southern Africa), discusses the affixes which affect the predicate argument structure of the verbs they are attached to, namely the applicative, causative, stative, passive and reflexive. He argues that these affixes are verbal affixes which alter the predicate argument structure of the verbs they are attached to, by adding binding or suppressing thematic roles. He also discusses the co-occurrence of various affixes and how they affect the predicate argument structure of verbs they are attached to. Our study discusses some of the verbal affixes discussed in Matsinhe (1993) with an exception of the reflexive affix and establishes the effect of the affixes on the number of elaborators that the verb attracts to the clause. The affixes are derived
singly and also multiply in order to determine this effect. While Matsinhe's study makes reference to Tsonga, our study deals with Kikamba.

Mchombo (1993) makes an analysis of the stative affix in Bantu with specific reference to Chichewa. He works within the theory of Lexical-Functional Grammar. His study differs from this study in that although we discuss the stative affix, our reference is made to Kikamba and we also work within a different theoretical model.

Kioko (1994) looks at some of the affixes in the verb e.g. the passive, the causative, the reflexive, the reversive etc. that affect grammatical relations and discusses them in relation to syntax in the modern theories. Even though the verb is not the major concern of her study, in a section of her study, she discusses the different verb forms (e.g. the imperative), tense, aspect and the verb root. Our study differs from her study in that, although she analyses the morphology of the verb she does not address issues pertaining to the verb and the complements it attracts to its orbit which are the concern of our study.
Dubinsky and Simangu (1996) examine the stative and passive affixes in Chichewa and conclude that the syntax of the two constructions is best accommodated in a model that allows argument structure changing operations such as stative to be distinguished from operations such as passive that affect the mapping from argument structure to grammatical function. This study relates to our study in that, we also discuss the stative and the passive affix but in relation to the change their presence in a verb causes to the number of elaborators that accompany the verb.

Kioko (1998) outlines the criteria for determining the 'direct' object in Bantu. She points out that in Bantu, the term 'primary object' is more relevant than 'direct object'. According to her, the NP that counts as a primary object is the one with a benefactive function, has access to the object prefix slot in the verb morphology and assumes the subject position in a corresponding passive. Our study discusses the NPs that occur in clause structure with both basic and derived verb but does not determine whether they are direct or indirect objects. The concern of our study is the number of elaborators but not their syntactic functions.
Mwangi and Kioko (1998) discuss the syntactic and semantic features affecting the distribution of the morphological causative affixes in central Kenya Bantu. They discuss the features of the two types of causative affixes making use of examples from Kikamba, Kimeru, Kikuyu and Kiembu. This study has a lot of relevance to our study because the causative is one of the affixes that we make use of in determining the valency of the derived Kikamba verb. But while their study concentrates on the distribution of the two causative affixes, our study examines the effect of the presence of a causative affix on the valency of the verb.

2.4 Studies on the Kikamba verb

Although a lot of study has been done on the Bantu verb as seen in section 2.3, there are still a number of studies that touch on the Kikamba verb.

Kioko (1993) discusses the issues involved in identifying the form of the verb 'be' in Kikamba and isolates the form í as the basic form. She further notes that the í verb is obligatory where there are obligatory
affixes. This study relates to our study in that it discusses a Kikamba verb and our study is an investigation into the valency of the Kikamba verb. Kioko in her study, outlines the various clause structures that the verb 'be' in Kikamba can fit in. However, in our sample of verbs the verb 'be' does not appear but its valency is discussed in our study. In

Kioko (1995) describes the multiple applicative construction in Kikamba and examines the implications of the facts established to the analysis of the applicative affix, which is one of the affixes, that our study makes use of. However, she mainly examines cases where more than one applied affixes are used on one verb. Our study deals with the valency of the verb when it attaches to one or more applied affixes.

Kioko (1999) discusses the syntactic status of the reciprocal and the reflexive affixes in Bantu with evidence from Kikamba. She deals with markers of reflexivity and reciprocity bringing out that in Kikamba and other Bantu languages, these two are marked by monomorphemic verb affixes. While this study focuses on the syntactic status of the reciprocal and the reflexive affixes, our study focuses on other affixes.
e.g. the causative, the applicative, the passive and the stative and their effect on the valency of the Kikamba.

2.5 Conclusion

Chapter two outlines the studies related to our study both in Kikamba and English. The studies in English such as Allerton (1982), serve as a guide to our study as well as a source for the model used in the analysis of our data. Some of the studies on the Kikamba verb such as Kioko (1993), Kioko (1994) and Kioko (1995) assist in providing the researcher with information on some of the affixes such as the passive and the applicative. The following three chapters comprise data analysis, presentation, findings and conclusions.
CHAPTER THREE

VERB VALENCY STRUCTURES IN BASIC KIKAMBA VERBS

3.0 Introduction:

This chapter deals with the analysis of the valency of the basic verb. As said in section 1.7, the valency of the verb is determined using Allerton’s (1982) model of analysing valency structures. This chapter is divided into three subsections: valency of the basic intransitive verbs, valency of basic transitive verbs and valency of verbs which can be used both transitively and intransitively. A table is provided at the end to summarize the observations made in the chapter.

The basic verb in Bantu comprises the verb root (also called the verb radical) and one suffix, the final vowel as seen in Kioko (1994) and Polome (1967). It is basic to the extent that it has no identifiable derivational affixes as shown in (13) below:

(13)    Basic Verb    Root    Gloss
   (a)     theela    theel-  kick
   (b)     ūlūka    ūlūk-  fly
   (c)     nenga    neng-  give
   (d)     koma    kom-  sleep
3.1 Valency of Basic Intransitive Verbs.

For traditional grammarians, passivization has been used as a test for transitivity. Their claim is that a transitive verb can be used in the passive while an intransitive verb cannot. This, however, does not hold for Kikamba. A verb that does not take a direct object in Kikamba may be followed by a locative NP which takes the subject position in the corresponding passive as shown in examples 14(a) and (b) below.

(14). (a) Mütia nĩwaenda mũũndanĩ.
Mutua gone shamba.
Mutua has gone to the shamba

(b) Muundanĩ nĩvaend-w-a.
Shamba gone – PASS-FV.
The shamba has been gone to.

In example 14(a) above, enda 'go' takes a locative NP which may or may not be obligatory depending on the context of the clause and which may become the subject in the corresponding passive as in 14(b). However, it is not all locative NPs that occur after an intransitive verb in a clause which can become a subject in the corresponding passive, (cf. Kioko (1994)). Intransitive verbs without a locative can be used in the passive but the resulting passive construction has no thematic subject as shown in example 15(b) below.
We have considered verbs like *enda* 'go' above as intransitive despite their peculiar behaviour in Kikamba. This has been based on the fact that the locative NP is optional in the active form of the verb. To distinguish between intransitive verbs and transitive verbs, we have used the criterion that transitive verbs take a direct object while intransitive verbs do not. An intransitive verb in Kikamba can therefore be defined as the type of verb that is not followed by a direct object but can be used in the passive form.

We take as direct object the NP that occurs after the verb.

Let us now consider the valency structures of the basic intransitive verb.

Basically, a verb can be described as zero-valent, monovalent, divalent, trivalent or tetravalent as said in Allerton (1982). To determine the valency we must refer to the structure in which the verb occurs in terms of particular combinations of the various possible elaborators. In Kikamba, intransitive verbs fall into three valency categories: zero-valent, monovalent and divalent. Zero-valent verbs are verbs that have no true
elaborator, not even a valent subject, hence they have an empty subject position. This in Bantu linguistics is referred to as a dummy subject. The subject position is said to be empty because according to Kioko (1994), it can be filled by words such as kū and va ‘here’ which are place markers, hence cannot be subjects. The use of such words in clause structure would lead to pleonasm. From our sample, only one verb is zero-valent, i.e. ua 'rain’ as shown in examples 16(a) and (b) below:

(16) (a) Ntkwaua.  
It rained.

(b) Ntkwaua (muno)  
It rain (much)  
It rained (heavily)

In 16(b) above, the adverbial phrase muno 'heavily’ is optional and the structural patterns in (16) above can be described as:

Valency Structure O: Ø + V

The verb is zero-valent or V⁰

The valency structure O above shows that no true elaborator is present.

O is used by Allerton (1982) to describe a structural pattern that has no elaborator.
The verb *ua* 'rain' above can take either a cognate subject or object but in either case it is optional hence it does not affect the valency of the verb as in example (17) below.

(17) (a) *Mbu a n iya a u.*
Rain rained.
Rain has rained.

(b) *N i k w a u a m b u a m b i n g i.*
It rained rain much.
It has rained heavily.

In 17 (a) *mbua* is a cognate subject while in 17 (b) it is a cognate object.

The verbs that occur in the zero-valent patterns describe meteorological processes hence we have referred to them as 'weather' verbs. Other verbs in this pattern (not in our sample) include *tuka* 'get dark' and *k ya* 'get to dawn.'

The other type of intransitive verbs in Kikamba takes one or two elaborators. Allerton (1982) claims that those verbs that take one elaborator, which is the subject, are the pure or standard intransitive verbs. However, in this study both the intransitive verbs with one elaborator and those with two elaborators have been considered intransitive since none of the elaborators is a direct object. Monovalent verbs are those verbs that take a single elaborator and this is typically the subject. However, in
Kikamba we observed that the one elaborator present can also occupy the object position as shown in examples 18(b) and 19(b) below.

(18) (a) Ngitē nīyakūma.
Dog bark.
The dog has barked.

(b) Nīkwakūma ngitē
There bark dog.
There has barked a dog.

(c) *Nīkwakūma.

(19) (a) Kana nīkavalūka.
Child fell.
The child has fallen.

(b) Nīkwavalūka kana.
There fall child.
There has fallen a child.

(c) *Nīkwavalūka.

The (a) and (b) examples above show that the one obligatory elaborator present can function either in subject or in object position. The (c) structures show that without the one obligatory elaborator these verbs produce ill-formed sentences. Sentence structures which are in the negative form can be constructed without affecting the valency of these verbs as in (20) and (21) below.
The patterns in 18(a) and 19(a), (20) and (21) can be described as:

Valency Structure 1: Subject + V

The patterns in 18(b) and 19(b) can be described as:

Valency Structure 02: Ø + V + Object.

The verbs expressed in the two valency structures above are monovalent or V1. This shows that verbs with one elaborator can fall into two different valency structures but express the same valency.

The one elaborator present in 18(b) and 19(b) above has been referred to as object on the basis of its syntactic position i.e. after the verb.

When a structural pattern has an empty subject position, O is used to describe the subject position in the resulting valency structure.

Monovalent verbs can take optional locative NPs which lie outside valency as shown in (22) and (23) below.

(22) Syana nisyatingama (nzianí).
Children stood (road).
The children have stood by the road
(23). Syana nǐsyasemba (kīwanzani).
The children have run (at the field).

The locative NPs nzānī 'at the road' and kīwanzani 'at the field' in (21) and (22) above are optional.

These verbs semba 'run' and ūngama 'stand' can also take adverbial elaborators which are optional and outside valency as seen in (24) and (25). below.

(24.) Syana nǐsyāungama (mūno).
The children have stood (for long).

(25). Syana nǐsyasemba (mītukī).
The children have run fast.

The adverbials mūno 'for long' and mītukī 'fast', in the examples above, do not affect the valencies of the verbs. Both a locative and an adverbial elaborator can occur in a construction with a transitive verb and they will be optional as in (26) below.

(26) Syana syāungama (nzānī) (mūno).
The children have stood (at the road) (for long).
Other verbs in the intransitive verbs category take two obligatory elaborators. The verb kuma 'come from' (not in our sample) takes an obligatory locative NP as shown in (27) below.

(27) Müeni auma sukulu.
    Mueni has come from school.
    Mueni has come from school.

If this verb is used in a construction without the locative, the sentence will be ill formed as in (28) below.

(28) *Müeni níwauma.

The pattern in (27) above can be described as:
Valency structure 15: Subject + V + Locative NP (basic)

The basic verb is divalent or $V^2$.

Therefore, intransitive verbs can be zero-valent, monovalent or divalent.

### 3.2 Valency of Basic Transitive Verbs

A transitive verb is mainly determined by the presence of a direct object in the clause. What serves as a direct object in a particular language is defined by a number of syntactic and semantic features as observed in Kioko (1998). Although other verb elaborators like indirect object may occur together with the direct object in a clause, the direct object is
obligatory with a transitive verb and it is the one that determines transitivity. Quirk et al (1985) assert that a transitive verb in English must be followed by a direct object in a sentence and it takes a passive form. This also applies to transitive verbs in Kikamba although intransitive verbs also take a passive form.

With reference to the basic transitive verbs in our sample, nine are monotransitive and one is ditransitive. Using these verbs, divalent and trivalent valency structures were identified. Monotransitive verbs have two elaborators, where one is subject and the other is the direct object as shown in 29(a) and 30(a) below.

(29) (a)  Kana nîkekya mûvîla.
Child throw ball.
The child has thrown a ball.

(b)  *Kana nîkekya.

(30) (a)  Mûeni nîwamantha îvûkû.
Mueni searched for book.
Mueni has searched for the book.

(b)  *Mûeni nîwamantha.
The (b) structures above show that when the direct object is left out, the resulting structure is ill formed. This confirms that with verbs such as **mantha** and **tkya**, a direct object is obligatory.

Transitive verbs can take an optional adverbial phrase or even a locative NP as shown in (31) and (32) respectively.

(31) Kana nîkekya mûvîla (nesa).
    Child thrown ball (well).
    The child has thrown the ball (well).

(32) Mueni nîwamantha ìvuku (kavatini).
    Mueni searched for book shelf
    Mueni has searched for the book in the shelf.

In (31) above **nesa** 'well' is an adverbial phrase which is optional while in (31) **kavatini** 'shelf' is an optional locative NP. The locative NP can occupy the subject position in a corresponding passive and this makes it obligatory as in (33) below.

(33) Kavatini nîvamanth-w-a ìvuku.
    Shelf search for - PASS-FV book.
    A book has been searched for in the shelf.

However, if the object is omitted and either the adverbial phrase or the locative is present, the resulting structure is ill formed as in (34) and (35) below.
(33) *Kana nīkekya nesa.

(34) *Mūeni nīwamantha kavatinī.

If constructions such as (34) and (35) above are made in speech, the hearer will immediately ask, what? implying that an obligatory element has been left out.

Some verbs in this category can take a finite clause as the direct object as shown in (36) below.

(36) Mwalimu nīwalilikana (kana) nīmūselee.
     Teacher remembered (that) he is late.
     The teacher remembered (that) he is late.

The finite clause ‘kana nī mūselee’ above though a clause on its own, shall be considered as a direct object in this case.

Therefore, the structures formed with transitive verbs above can be described as:

Valency structure 12: Subject + V + Object.

The verbs are divalent or $V^2$.

The verb be which in Kikamba is realised by four forms e, nī, ī, and -īthīw-, Kioko (1993) is divalent as shown in (37) below.
Each of the examples above has a different valency structure from the rest except (b) and (d). The structural patterns in (37) above are described as:

(37a) Valency structure 14N: Subject + V + Predicative Noun.

(37b) Valency structure 15: Subject + V + Locative NP (basic).

(37c) Valency structure 14A: Subject + V + Predicative Adjective.

(37d) Valency structure 15: Subject + V + Locative NP (basic)

The verb be is divalent or V^2

Ditransitive verbs take a subject and two other elaborators. Hence they are trivalent as shown in (38) below:

(38) Mwalimu nĩwanenga Mũeni muthĩnzio.
Teacher give Mueni present.
The teacher has given Mueni a present.
Some verbs such as **eka** 'forgive' which are monotransitive can also be used ditransitively as in (39) below.

(39) Mwalimu niwekea syana mavityo.
The teacher has forgiven the children their mistakes.

It is worth noting that some verbs such as **eka** are multivalent, that is, they occur in different valency categories depending on the number of elaborators they take in the clause. The patterns in (38) and (39) above can be described as:

Valency structure 122: Subject + V + Object + object.

The verb is trivalent or V³.

Other verbs in the category of transitive verbs such as **ia** 'keep' (not in the sample) take a direct object and a locative NP after the verb and the two elaborators are obligatory as in (40) below.

(40) Mueni niwaia mūvuko nyūmba.
Mueni has kept the bag in the house.

This pattern can be described as:

Valency structure 125: Subject + V + Object + Locative NP (basic)
Therefore, monotransitive verbs become divalent as shown in examples (29-37) while ditransitive verbs become tetravalent as in examples (38-40) above.

3.3 Valency of Basic Verbs that can be used both Transitively and Intransitively:

The verbs in this category have been selected on the criterion that they can be used both transitively (with an object) and intransitively (without an object). Most of the verbs in our sample take cognate objects in their transitive use. The verbs whose object can be deleted and yet be recovered shall not be part of our data in this category. Allerton (1982) says of such verbs that their objects may be suppressed in actual sentences providing that they are definite and can be assumed to be contextually evident to the listener. He refers to such objects as latent objects as shown in (41) below.

(41) Mutua niwasoma (i̱vuku).
    Mutua read (book).
    Mutua has read (a book).

The latent object i̱vuku ‘book’ has been put in brackets to show that the possibility of its presence in the construction is not lost as it remains latent.
In this study, verbs such as (41) above have been considered transitive hence do not fall in this category.

In this category, we include verbs that take cognate objects and verbs which can take an object and can also be used without it. Quirk et al. (1985:750) point out that in cognate objects, the noun head is semantically and morphologically related to the verb. In this study, cognate objects have been considered as obligatory verb elaborators hence they lie within valency. Such verbs, therefore, have an intransitive and transitive use. The intransitive use is evident when the verb does not take an object.

All the verbs in this category are ambivalent, that is, each verb falls into two valency structures. The intransitive use results in monovalent structures while the transitive use results in divalent structures as shown in (42) and (43) below.

(42) (a) Kīveti nīkyavoya.
Woman prayed.
The woman has prayed.

(b) Kīveti kyavoya mboya ndaasa.
Woman pray prayer long.
The woman has prayed a long prayer
In examples 42(a) and 43(a) the verbs are used intransitively and the structural patterns can be described as:

Valency structure 1: Subject + V.

In examples 42(b) and 43(b) above the verbs are used transitively and the structural patterns can be described as:

Valency structure 12: Subject + V + Object.

This shows that the verbs can be either monovalent or divalent since they can take either one or two elaborators in clause structure.

When the verb is used intransitively, as noted in section 3.1, the only elaborator present can occur in either subject or object position as in (44) below.

(44) (a) Kīveti nīkyavoya.
Woman prayed.
The woman has prayed.

(b) Nīkwavoya kīveti.
There prayed woman.
There has prayed a woman.
The structural pattern in 44(a) above can be described as:

Valency structure 1: Subject + V.

The structural pattern in 44(b) above can be described as:

Valency structure 02: O + V + Object.

The verb is monovalent or V₁.

The verbs that take cognate objects also fall into two valency structure categories as shown in (45) and (46) below.

(45)  
(a) Kana nǐkakoma.  
Child slept.  
The child has slept.
(b) Kana nǐkakoma too.  
Child slept sleep.  
The child has slept sleep.

(46)  
(a) Kana nǐkaña.  
Child cried.  
The child has cried.
(b) Kana nǐkaña methoi.  
Child cried tears.  
The child has cried tears.

In these examples, the elaborators too 'sleep' and methoi 'tears' are cognate objects.

The structural pattern in 44(a) and 45(a) can be described as:

Valency structure 1: Subject + V.
The basic verbs are monovalent V¹.

The structural patterns in 45(b) and 46(b) can be described as:

Valency structure 16: Subject + V + Cognate Object.

The verbs are divalent V².

Examples 45(a) and 46(a) can be rephrased as:

(47) (a) Nīkwakoma kana.
There slept child.
There has slept a child.

(b) Nikwaña kana.
There cried child.
There has cried a child.

The two structural patterns above can be described as:

Valency structure 02: Ø + V + Object.

This implies that just like it happens with the pure intransitive verbs the only elaborator present can occupy either the subject or object position without making the construction ill-formed.

The only elaborator present in 47(a) and (b) above, has been referred to as object due to its syntactic position.

Examples such as (45b) and 46b) were tried in passive constructions to prove whether cognate objects are true objects or objoids as in (48) below.

(48) (a) *Too nīwakom-w-a (nī kana).

(b) * Methoi nīmaĩ-w-a (nī kana).
The resulting passive construction in 48(a) and (b) are ill-formed showing that cognate objects cannot occupy the subject position in a corresponding passive construction hence they are not passivizable. An interesting question arises here: Are cognate objects then true objects or objoids? To a great extent, it may be said that they are not true objects because they are not passivizable.

Therefore, the verbs that can be used both transitively and intransitively are either monovalent or divalent.

The observations made with reference to the valency of the basic verb types are summarized in Table (3) below.

**TABLE 3: Valency of the Basic Verb.**

<table>
<thead>
<tr>
<th>VERB CATEGORIES</th>
<th>VALENCY OF BASIC VERB</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRANSITIVE</td>
<td>Zero-valent, Monovalent/Divalent</td>
</tr>
<tr>
<td>INTRANSITIVE/TRANSITIVE</td>
<td>Monovalent/Divalent</td>
</tr>
<tr>
<td>MONOTRANSITIVE</td>
<td>Divalent</td>
</tr>
<tr>
<td>DITRANSITIVE</td>
<td>Trivalent</td>
</tr>
</tbody>
</table>
3.4 Conclusion:

Basic verbs in Kikamba fall into four valency categories: zero-valent, monovalent, divalent and trivalent. The intransitive verbs in the zero-valent category are those that have no true elaborator while the monovalent verbs are those with one obligatory elaborator. Intransitive verbs with an obligatory locative NP are divalent because they take two obligatory elaborators. The verbs that are used both intransitively and transitively are monovalent in the intransitive use and divalent in the transitive use. Monotransitive verbs are basically divalent while ditransitive verbs are trivalent since they take three true verb elaborators.
CHAPTER FOUR

VERB VALENCY STRUCTURES IN KIKAMBA DERIVED VERBS

4.0 Introduction

This chapter deals with the valency of the derived verbs in Kikamba. We discuss two types of derived verbs: singly derived verbs and multiply derived verbs. The singly derived verbs are those derived using one derivational affix while the multiply derived verbs include verbs derived by doubling one particular affix or by using two (or more) different affixes on one verb. For instance, when a verb is derived using the causative affix, it is singly derived whereas when a verb is derived using two causative affixes or a causative affix and an applicative affix, it is multiply derived.

This chapter comprises two sections and in each section there are sub-sections. The first section includes the singly derived verbs and it has four sub-sections: the causative derived verbs, the applicative derived verbs, the passive derived verbs and the stative derived verbs. The second section includes the multiply derived verbs and it has two sub-sections: Doubling of affixes and Co-occurrence of affixes. At the end
of the section a table is given which summarises the observations made with reference to the valency of the derived verb as compared to the valency of the basic verb.

In the presentation of examples, the verb will be analysed to isolate the forms of the morphemes which will be dealt with, but the verb prefixes will not be analysed unless they are relevant.

4.1.0. Singly Derived Verbs

This section tackles each of the four derivational affixes independently. Each derivational affix and its effect on the valency of the basic verb is discussed in its own sub-section. In each sub-section, we start by describing the derivational affix and then, using examples we identify the valency structures the derived verb occurs in and thus determine its valency.

4.1.1. The Causative Derived Verb

The causative morpheme is a derivational affix that can attach to any verb that has at least one argument as shown in Kioko (1994). This affix gives the verb the meaning of causation which may be either
voluntary or forced on the part of the causee. According to studies done on the description of the causative construction in world languages, such as Comrie (1976, 1981), the main types recognized are the lexical, the non-lexical and the morphological causative. We do not give details on the lexical and the non-lexical causatives since our concern is in the morphological causative. The morphological causative patterns by the use of verbal affixes for example, in Turkish the suffixes 't' and 'dir' (which are variants of the causative affix) can be added to any verb to give its causative equivalent e.g. göster 'show', göster-t 'cause to show'; öl 'die' oldur, 'cause to die' as noted in Comrie (1981). This means of relating non-causative and causative constructions through affixes is very productive as seen in Comrie (ibid).

In a recent study, Mwangi and Kioko (1998) found out that in the Central Kenya Bantu Languages, Kikamba being one of them, there are three types of causative constructions.

i) The non-Lexical causative

ii) The Lexical causative
iii) The morphological causative which makes use of verbal affixes as in 49(b) below.

49 (a) Syana nisyaina.
    Children sing.
    The children have sung.

(b) Mwalimu niwain-ithy-a syana.
    Teacher sing -CAUS-FV children.
    The teacher has made the children sing.

An examination of our data led to the identification of two basic causative affixes -i- and -ithi-. This concurs with Mwangi and Kioko (1998) and also Kioko (1994). Due to phonological processes the realization of these two affixes is affected such that -i- is also realized as -y-, -e-, and -sy- while -ithi- is realized as -ithy- and -ethy-.

Some linguists such as Matsinhe (1993) and Comrie (1981) have argued that the morphological causative construction normally has a valency one higher than that of the corresponding non-causative construction. This can be expressed as:

$$X^{n+Caus} = X^{n+1}$$

(where $X^n$ stands for the valency of the basic verb). At this point a question arises; Does this hold for Kikamba causative constructions?
In response to this question, we start by considering the effect of the causative affix on the basic intransitive verbs *ua* 'rain' *thama* 'migrate' and *valůka* 'fall' in (50), (51) and (52) below.

(50) * X *niwau-íthy-a mbua.

Zero valent verbs such as *ua* 'rain' cannot take the causative morpheme. *TJ-ís* is a weather verb and *ro* cause can be used to make weather changes. A construction such as (50) above is ill formed.

51 (a) Andú nǐmathama.
The people migrate.

52 (a) Kana nǐkavalůka.
Child fall.

(b) Mūțūa nīwatham-i-a andū.
Mutua migrate-CAUS-FV people.

(b) Mueni nīwavalūk-ī-a kana.
Mueni fall - CAUS-FV child.

(c) Mūțūa nīwatham-íthy-a andū
Mutua migrate-CAUS-FV people.

(d) *Mūțūa nīwatham-íthy-a.

Mutua has made the people migrate.

(b) Mueni nīwavalūk-ī-a kana.
Mueni has made the child fall.
From the (b) and (c) examples above, we notice that the basic intransitive verb occurs with either of the two causative affixes. When either of the causative affixes is used, a new elaborator which is the causer occupies the subject position and the elaborator that had occupied this position occupies the object slot. Hence the derived verb takes one more elaborator thus its valency increases by one. The structural patterns in 51(b) and (c) and 52(b) and (c) can be described as:

Valency Structure 12: Subject + V + Object.

The causative derived verbs are divalent or $v^2$.

The difference between (b) and (c) is that when the -i- morpheme occurs with the verb as in 51(b) and 52(b) above, there is no volition while when the -ithi- morpheme occurs with the verb as in 51(c) and 52(c) the causer uses some force on the causee.

The (d) examples above are ill formed because they take the causative morpheme without bringing in an extra elaborator.
With the basic transitive verbs such as *theela* 'kick' only one of the affixes can be used as shown in 53(b) below. A construction where the -i- morpheme is used with the verb *theela* is ill-formed as in 53(c) below.

53(a) Kana nǐkatheela mūvīla
Child kicked ball.
The child has kicked a ball.

(b) Mwalimū nǐwatheel-ethy-a kana mūvīla
Teacher kicked -CAUS-FV child ball.
The teacher has made the child kick a ball.

(c) *Mwalimū nǐwatheel-i-a kana muvīla.

When the causative affix is used with monotransitive verbs as in 53(b) above one more elaborator which is a causer is added to the clause and it occupies the subject position. The elaborator which occupied the subject position in 53(a) takes the position close to the verb in the corresponding causative construction. This position according to Kioko (1998) is the position of the primary or prime object in Bantu languages. The causative affix in 53(b) expresses the meaning of 'coercing the causee to perform an action'.

The structural pattern can be presented as:

Valency Structure 122: Subject + V + Object + Object.

The causative derived verb is trivalent or $V^3$. 
Ditransitive verbs such as *nenga 'give' have their valency increased from $V^3$ to $V^4$ when they occur with the causative affix as shown in 54(b) below.

54(a) Mūli nīwanenga ngiți līu.
Muli given dog food
Muli has given the dog food.

(b) Mūtua nīwaneng-ethy-a Mūli ngiți līu.
Mutua given -CAUS-FV Muli dog food.
Mutua has made Muli give the dog food.

The structural pattern in 54(b) is:

Valency structure 1222: Subject + V + Object + Object + Object.

The derived verb is tetravalent or $V^4$.

Some basic transitive verbs such as *ekea 'forgive' and *athima 'bless', if used with the causative affix, give rise to semantically ill-formed derived verbs. These two verbs involve emotional processes which cannot be affected by a causer as shown in 55(b) below:

55(a) Mwalimū niwaeekea kana.
Teacher forgiven child.
The teacher has forgiven the child.

(b) *Mūsyai niwaeeke-ethy-a mwalimū kana.

Valency structure 1222: Subject + V + Object + Object.
The verbs that are used both transitively and intransitively also pattern with the causative affix and have their valency increased by one. To exemplify this, the verb *ina* 'sing' has been used in (56) and (57) below:

(56) (a) Syana nîsyaina.  
Children sung.  
The children have sung.

(b) Mwalimũ nîwain-îthy-a syana.  
Teacher sung-CAUS-FV children.  
The children have sung a song.

(57) (a) Syana nîsyaina wathi.  
Children sung song.  
The children have sung a song.

(b) Mwalimũ nîwain-îthy-a syana wathi.  
Teacher sung - CAUS-FV children song.  
The teacher has made the children sing a song.

In example (56) the verb *ina* has been used intransitively while in (57) it is used transitively. The structural pattern in 56(b) can be described as:

Valency structure 12: Subject + V + Object.

The causative derived verb is divalent or $V^2$.

The structural pattern in 57(b) can be described as:

Valency structure 122: Subject + V + Object + Object.
The causative derived verb is trivalent or $V^3$.

The verbs that take cognate objects in this category when used transitively have a different valency structure from the one in 57(b) above as shown in 58(b) below.

(58) (a) Kana nǐkakoma too.
Child slept sleep.
The child has slept sleep.

(b) Mueni nǐwakom-ethy-a kana too.
Mueni slept – CAUS-FV child sleep
Mueni has made the child sleep sleep.

The structural pattern in 58(b) above can be described as:

Valency structure 126: Subject + Verb + Cognate Object

The causative derived verb is trivalent or $V^3$.

4.2.2. The Applicative Derived Verb

Some verbs in this category such as ota 'dream' and thūmua 'rest' result into semantically ill-formed verbs when used with the causative affix as in 59(b) below:

(59) (a) Mūli nǐwaota ndoto nzeo.
Muli dream dream good.
Muli has dreamt a good dream.

(b) *Mūeni nǐwaotethya Mūli ndoto nzeo.

The verb has ota 'dream' which involves a mental process cannot be affected by a causer. It is a natural action on the part of the doer.
Zero valent verbs do not take the causative affix. All the other basic verbs, irrespective of their categories, have their valency increased by one when they occur with the causative affix. Intransitive verbs change from monovalent to divalent (example 52), intransitives with an obligatory locative NP change from divalent to trivalent, monotransitive verbs from divalent to trivalent (example 53) and ditransitive verbs from trivalent to tetravalent (example 54). We, therefore, concur with Comrie (1981) that the causative derived verb has a valency one higher than the basic verb. Hence the causative affix is a valency increasing affix.

4.1.2. The Applicative Derived Verb

The applicative morpheme can be defined as a derivational affix whose function is to signal the presence of an NP which is not part of the basic sub-categorization of the verb, Kioko (1994:57). This morpheme is also referred to as the benefactive verbal extension. This is because one of the morpheme’s semantic roles is beneficiary. The NP whose presence is signalled by the applied affix may be associated with different semantic roles: Locative, Beneficiary/Maleficiary, Motive, Possessor and Experiencer, (Kioko 1994).
Although the applicative affix has been studied in world languages, most studies on this construction such as Marantz (1984), Baker (1993), Kioko (1994) and Matsinhe (1993) have mainly discussed Bantu languages. According to Marantz (Ibid), there are two ways of identifying applicative constructions. The first and most popular is based on the semantic function of the introduced 'argument' (the applied argument) and the other as used in Baker (1988) is based on proposed underlying structures (the presence or absence of a preposition in the deep structure). Since our interest is in the number of elaborators the applied affix can add to the clause, we are only concerned with the extent to which the presence of an applied affix affects the valency of the basic verb.

Generally all the verbs in Kikamba take the applied affix. According to Kioko (Ibid) this morpheme is realized as -e/-i - or -el/-il-. We note that this morpheme can also be realised as -sy- in cases where the verb root ends in a vowel, for example, *Iky a 'throw' whose underlying form is *iki-a becomes *kkisya 'throw to'/'throw while at'/'throw for'.

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With illustrations we shall show that the applicative affix is valency increasing in Kikamba.

We consider the intransitive verbs first: Zero valent verbs such as *ua 'rain' only pattern with two applied affixes and so will be discussed in 4.2.1.2 below. If one applied affix is used with the verb, the resulting derived verb is uninterpretable as shown in 60(b) below:

(60) (a) Nǐkwaua
   There rained.
   It has rained.

(b) *Nǐkwau-ī-a Mūlī.

Next we consider intrasitive verbs which are monovalent.

Monovalent verbs such as *elūka 'fly' have their valency increased by one when used with the applied affix. The new elaborator introduced by the applied affix is a motive NP as in 61(b) below:

(61) (a) Nyūnyi nīsyāulūka
   Birds fly.
   The birds have flown.

(b) Nyūnyi syāulük-īl-a wīa.
   Birds fly -APP-FV fear.
   The birds have flown because of fear.

The structural pattern in 61(b) above can be described as:

Valency structure 13: Subject + V + Objoid (Motive NP).
The applicative derived verb is divalent or \( V^2 \).

The new elaborator \( w'ia \) 'fear' has been considered an objoid because it cannot take the subject position in a corresponding passive construction.

When intransitive verbs which take an optional locative NP such as \( \text{enda} \) 'go to', are used with an applied affix, the locative NP becomes obligatory as shown in 62(b) below. The applied affix can also introduce a motive NP when the locative NP is not present as seen in 62(c) below. When the applied affix introduces a beneficiary, the locative NP becomes obligatory as shown in 62(d) below. A construction where a beneficiary is introduced and the locative is absent is ill-formed as shown in 62(e) below:

(62) (a) \( \text{Mütúa níwaenda (ndukanĩ).} \)
\( \text{Mutua gone to (shop).} \)
\( \text{Mutua has gone (to the shop).} \)

(b) \( \text{Mütúa aend-e-a ndukanĩ.} \)
\( \text{Mutua gone-APP-FV shop.} \)
\( \text{Mutua has gone while at the shop.} \)

(c) \( \text{Mütúa aend-e-a w'ia.} \)
\( \text{Mutua gone-APP-FV - fear.} \)
\( \text{Mutua has gone because of fear.} \)
(d) Mūtūa aend-e-a Mūeni ndukanī.
Mutua gone-APP-FV Mueni shop.
Mutua went to the shop for the benefit of Mueni.

(e) *Mūtūa aend-e-a Mūeni.

The structural pattern in (b) can be described as:
Valency structure 13: Subject + V + Objoid (Locative NP)

The structural pattern in (c) can be described as
Valency structure 13: Subject + V + Objoid (Motive NP)

The applicative derived verbs in (b) and (c) are divalent or V^2.

The structural pattern in (d) can be described as:
Valency structure 125: Subject + V + Object + Locative NP (basic).

The applicative derived verb is trivalent or V^3.

We notice here that the derived locative is obligatory.

When the verb enda with a locative is used with an applied affix, the
affix can introduce a motive NP. In such a case both elaborators are
obligatory as in (63) below:

(63) Mūtūa aend-e-a ndukanī wīa.
Mutua go -APP-FV shop fear.
Mutua has gone while at the shop because of fear.

The structural pattern in (63) above can be described as:
Valency structure 153: Subject + Verb + Locative NP(basic)+Objoid.
The applicative derived verb is trivalent or $V^3$.

Hence the elaborators introduced by applied affixes to monovalent verbs are limited: Locative NP (example 62(b)), Motive NP (example 62(c)) and in some cases Beneficiary NP (example 62(d)).

When the applied affix is used with monotransitive verbs which are basically divalent, the elaborators introduced have the semantic roles locative, motive and beneficiary/maleficiary as in 64 (b),(c),(d) below:

(64) (a) Mwalimu n'iwakūna kana.
Teacher beat child.
The teacher has beaten the child.

(b) Mwalimu akun-í-a kana sukulu.
Teacher beat-APP-FV child school.
The teacher has beaten the child while at school.

(c) Mwalimu akun-í-a kana ngūlū.
Teacher beat-APP-FV child stubbornness.
The teacher has beaten the child because of Stubbornness.

(d) Mwalimu akūn-í-a mūsyai kana.
Teacher beat-APP-FV parent child.
The teacher has beaten the child for the benefit of the parent.
The elaborators *sukulu* 'school' and *ngūlū* 'stubbornness', which are locative NP and motive NP respectively, occur after the object *kana* 'child' while the elaborator *mūsyai* 'parent' which is a beneficiary NP occurs immediately after the verb. The structural pattern in (b) and (c) can be described as:

Valency structure 123: Subject + V + Object + Objoid.

The structural pattern in (d) can be described as:

Valency structure 122: Subject + V + Object + Object.

The applied derived verb in (64) above is trivalent or \( V^3 \).

Ditransitive verbs such as *nenga* 'give', which are basically trivalent, take the applied affix. When this happens, one more elaborator, which is either a beneficiary NP, a locative NP or a motive NP, is added to the clause as shown in 65 (b), (c), (d) below respectively. A construction where the applied derived verb is used without an extra elaborator is ill-formed as shown in 65(e) below.

(65) (a) Mūeni anenga kana ilu.
Mueni give a child food.
Mueni has given the child food.
(b) Mueni aneng-e-a Nzisa kana liu.
Mueni give-APP-FV Nzisa child food.
Mueni has given the child food for the benefit of Nzisa.

(c) Mueni aneng-e-a kana liu nyumba.
Mueni give-APP-FV child food house
Mueni has given the child food while in the house.

(d) Mueni aneng-e-a kana liu thina.
Mueni give-APP-FV child food poverty.
Mueni has given the child food because of poverty.

(e) *Mueni anengea kana liu.

The beneficiary elaborator Nzisa occurs immediately after the verb while the locative elaborator nyumba 'house' and motive thina 'poverty' occur after the other objects in the clause.

The structural pattern in 65(b) can be described as:
Valency Structure 1222: Subject + V + Object + Object + Object.

The structural patterns in 65(c) and (d) can be described as:
Valency Structure 1223: Subject + V + Object + Object + Objoid.

The applicative derived verb is tetravalent or V^4

The verbs that are used both intransitively and transitively also pattern with the applied affix as shown in 66(b) and 67(b) below:

(66) (a) Syana nisyaina.
Children sing.
The children have sung.
In 66(b) the verb has been used intransitively and the structural pattern can be described as:

Valency Structure 12: Subject + Verb + Object.

The applied derived verb is divalent or $V^2$.

In 67(b) the verb has been used transitively and just like in 66(b) the elaborator introduced by the applied affix Mwalimū 'teacher' is a beneficiary NP and occurs closer to the verb. This structural pattern can be described as:

Valency Structure 122: Subject + V + Object + Object.

The applicative derived verb is trivalent or $V^3$. 
From the observations made above, we conclude that the applicative affix increases the valency of the basic verb by one. Thus the applicative affix is comparable to the causative affix in that the two increase the valency of the basic verb by one. They are also similar in that they do not occur with zero-valent verbs. However, as shown in this section zero-valent verbs occur with two applied affixes. The causative and applicative affixes differ with respect to the semantic roles associated with the NPs they introduce to the clause. The causative affix introduces NPs with the semantic role of agent while the applied affix introduces NPs with the semantic roles of locative, motive, beneficiary/maleficiary.

Zero-valent verbs do not take one applied affix. All the other basic verbs irrespective of their categories, have their valency increased by one when used with the applied affix. The applicative affix is valency increasing and its effects on the valency of the basic verb can be expressed as

\[ X^{n+1} = X^{n+1} \]

Intransitive verbs change from monovalent to divalent while intransitives with a Locative NP which are basically divalent when the
Locative NP is obligatory, become trivalent. Monotransitive verbs change from divalent to trivalent while ditransitive verbs change from trivalent to tetravalent. The verbs that are used both intransitively and transitively are basically monovalent and divalent and they change to divalent and trivalent respectively.

We also noted that when intransitive verbs used with an optional locative NP incorporate a derived beneficiary NP, the locative NP becomes obligatory as shown in 62(d) above.

4.1.3 The Passive Derived Verb

The passive morpheme is a derivational affix that gives emphasis to the action performed in a clause rather than the doer/agent. In a passive construction, since the process is more important, the doer is optional. The passive affix is typically present in all verbs that are in the passive voice. In Kikamba, the passive morpheme is realized as -w- and it occurs between the verb stem and the final vowel, Kioko (1994). Studies on the Bantu passive constructions such as Kioko (Ibid) and Matsinhe (1993) show that the affix patterns with nearly all verbs in
Bantu languages and this concurs with the observations made of the Kikamba verb in this study. Using examples, we now determine the effects of this affix on the valency of the basic verb in Kikamba. We consider the intransitive verbs first.

Intransitive verbs (as in section 3.1.1.) take passive forms. However, zero-valent verbs do not take a passive form since they have no elaborator that could be reduced by the passive affix. Intransitive verbs with one elaborator take a passive form and the only elaborator present is made optional as in (69) below:

(68) Ngitf niyakuma.
    Dog    bark.
The dog has barked.

(69) Nīkwakūm-w-a (nī ngitf).
    There bark -PASS-FV (by dog).
    There has been barked (by a dog).

In (69) above, the subject of the active construction can either be left out or introduced by an optional nī phrase in the corresponding passive construction. The 'nī phrase' in Kikamba has been included in our examples in order to trace the relationship between the active and
Valency Structure 0: $\emptyset + V$.

(Where $\emptyset$ stands for the empty subject and V for the verb as noted in section 1.7 above). The subject position is filled by thematically empty elements.

The passive derived verb is zero-valent or $V^0$.

When intransitive verbs with a locative such as enda 'go' take the passive affix, the locative occupies the subject position and becomes obligatory in the corresponding passive construction as shown in (71) below:

(70) Mũĩňa nĩwaenda mũũndani.
    Mutua go to shamba.
    Mutua has gone to the shamba.

(71) Mũũndani nĩvaend-w-a (nĩ Mũũla).
    Shamba go to -PASS-FV (by Mutua).
    The shamba has been gone to (by Mutua).

The structural pattern in (70) and (71) above can be described as:

Valency Structure 1: Subject + V.

The passive derived verb is monovalent or $V^1$. 
The optional NP locative in the active form becomes obligatory in the corresponding passive construction and it is the only elaborator present. This elaborator can also occupy the object position and the subject position remains empty as in (72) below:

(72) Nīkwaend-w-a mūndanī (nī Mūtūa).
There go to -PASS-FV shamba (by Mutua).
There has been-gone to the shamba (by Mutua).

This structural pattern can be described as:

Valency Structure 02: Ø + Verb + Object.

The passive derived verb is monovalent or V'.

Monotransitive verbs which are basically divalent occur with the passive affix as in 73(b) below:

(73) (a) Kana nīkatheela mūvīla.
Child kick ball.
The child has kicked a ball.

(b) Mūvīla nīwatheel-w-a (nī kana).
Ball kick -PASS-FV (by child).
A ball has been kicked by the child.

In (73) above, the object in the active form of the sentences mūvīla ‘ball’ becomes the subject in the corresponding passive. This is typical of passive constructions involving transitive verbs where the object of the active construction becomes the subject of the passive
construction while the subject of the active construction is either left out or introduced by an optional 'nī phrase'. The pattern in (72) above can be described as:

Valency Structure 1: Subject + V.

The passive derived verb is monovalent or V^1.

Monotransitive verbs can also occur in constructions where the subject is filled by thematically empty elements as in (74) below:

(74) Nīkwatheel-w-a mūvīla (nī kana).
There kick -PASS-FV ball (by child).
There has been kicked a ball by a child.

This pattern can be described as:

Valency Structure 02: O + V + Object.

The passive derived verb from monotransitive verbs is monovalent or V^1.

When ditransitive verbs like nenga 'give' occur with the passive affix, two passive constructions are possible as shown in 75(b) and (c) below:

(75) (a) Mūeni nīwanenga Mwende īvuku.
Mueni give Mwende book.
Mueni has given Mwende a book.

(b) Mwende nīwaneng-w-a īvuku (nī Mūeni).
Mwende give -PASS-FV book (by Mueni)
Mwende has been given a book (by Mueni)
In examples (b) and (c) above, the elaborators that occur after the verb in the active form occupy the subject position in each case. In (b) the elaborator that occurs close to the verb in 75(a) occupies the subject position while in (c) the elaborator that occurs second from the verb in 75(a) occupies the subject position. The structural patterns in 75(b) and (c) can be described as:

Valency Structure 12: Subject + V + Object.

The passive derived verb here is divalent or $V^2$.

A third passive construction with ditransitive verbs is possible if the elaborators that occupy the object positions are all common nouns as in (76) below:

(76) Nīkwaneng-w-a kana īvuku (nī Mūeni).
There give -PASS-FV child book (by Mueni).
There has been given a child a book (by Mueni).

This pattern can be described as:

Valency Structure 022: $\emptyset + V + Object + Object$.

The passive derived verb here is still divalent or $V^2$
The verbs that are used both intransitively and transitively take the passive affix as shown in 77(b) and (c) below:

(77) (a) Syana nīsyaina
Children sing.
The children have sung.

(b) Nīkwain-w-a (nī syana)
There sing -PASS-FV by children.
There has been sung by children.

(78) (a) Syana nīsyaina wathi
Children sing song.
The children have sung a song.

(b) Wathi nīwain-w-a (nī syana).
Song sing -PASS-FV (by children).
A song has been sung (by children).

(c) Nīkwain-w-a wathi (nī syana).
There sing -PASS-FV song (by children).
There has been sung a song (by children).

In 77(b) the verb has been used intransitively and the structural pattern can be described as:

Valency Structure 0: Ø + V.

The passive derived verb is zero-valent or V⁰.

In (78) the verb has been used transitively and two passive constructions in (b) and (c) are possible. The structural pattern in 78(b) can be described as:

Valency Structure 1: Subject + V
The structural pattern in 78(c) can be described as:

Valency Structure 02: $\emptyset + V + \text{Object}$.

The passive derived verb is monovalent or $V^1$.

The verbs that take cognate objects such as 'cry' when used transitively have only one possible passive construction as in 79(b) below:

(79) (a) Kana $\tilde{n}ika\tilde{a}$ methoi
       Child cry tears.
       The child has cried tears.

(b) Kwa$\tilde{i}$-w-a methoi (n$\tilde{i}$ kana).
    There cry -PASS-FV tears (by child).
    There has been cried tears (by the child).

(c) *Methoi n$\tilde{i}ma\tilde{i}wa$ (n$\tilde{i}$ kana)

The second passive construction in 79(c) above is not possible and it is ill-formed. The structural pattern in 79(b) can be described as:

Valency Structure 06: $\emptyset + V + \text{Cognate Object}$.

The derived passive verb is monovalent or $V^1$.

From all the examples above, we conclude that the passive is a valency reducing affix and it reduces the valency of the basic verb by one. This is because it lays emphasis on the action and deletes motes the subject.
Zero-valent verbs do not occur with the passive affix. Intransitive verbs without a locative NP are reduced from monovalent to zero-valent while those with an obligatory locative NP are reduced from divalent to monovalent. The verbs that are both intransitive and transitive which are monovalent and divalent are reduced to zero-valent and monovalent respectively. Monotransitive verbs are basically divalent while difransitive verbs are trivalent and they are reduced to monovalent and divalent respectively. Intransitive verbs with an optional locative NP as well as monotransitive verbs result in two valency structures i.e. Valency Structure 02 and Valency Structure 1 because the locative NP occupies either the subject position or the object position.

4.1.4 The Stative Derived Verb

The stative morpheme is a derivational affix which shows the state of the NP subject involved. The stative morpheme in Kikamba can be realized as -ek- or -ík- as discussed in Kioko (1994:59).
This morpheme has two meanings depending on the syntactic environment in which it occurs. It has the meaning of an accomplished state when the morpheme [nĩ] precedes the verb and final vowel is a. When the morpheme [no] precedes the verb and the final vowel is e the stative morpheme has the meaning of potentiality of assuming a certain state as stated in Gathenji (1981). However, there are cases where the morpheme [no] precedes the verb and the final vowel is a and the meaning of potentiality is retained as shown in examples 80 (b) and (c) below:

(80) (a) Kana nĩkatheela mūvīla.
Child kick ball.
The child has kicked a ball.

(b) Mūvīla no ūtheel-ek-e/a.
Ball can kick -STV-FV.
The ball is kickable/can be kicked.

(d) Muvīla nīwatheel-ek-a.
Ball kick -STV-FV.
The ball has got kicked/It was possible for the ball to get kicked.

Example 80 (b) expresses the meaning of potentiality while 80 (c) has the meaning of an accomplished state. In other words, the action in 80 (b) is not yet done while in 80 (c), it is already done.
According to Givon (1990) 'In core-Bantu languages the stative construction (Suffix -Tk/-ek-) is obligatorily agent - deleting, fully promotional and semantically state resultive' (1990:618)

Other works such as Matsinhe (1993) state that the stative affix is valency reducing. In our analysis of the effect of the stative affix on the valency of basic verb, we show that these two statements hold true for Kikamba. We start by looking at the intransitive verbs. Zero-valent verbs which have no verb elaborator do not take the stative morpheme, since as stated earlier, it occurs with verbs that have at least two elaborators. This means that basic monovalent verbs also do not allow the occurrence of the stative affix since they have only one elaborator. When they do, the resulting derived verb is semantically uninterpretable as in 81(b) below:

(81) (a) Nyũnyi nĩsyũlũka. Birds fly. The birds have flown.

(b) *Nokũũũkũk-ik-e.

However, if basic intransitive verbs such as ũũkũka 'fly' above are used with an optional locative NP, the use of the stative affix is possible
and in the stative construction, the locative NP occupies the subject position hence becomes obligatory as in 82 (b) below:

(82) (a) Nyũnyi syaũũuka ũkũtanĩ.  
Birds fly wall.  
The birds have flown on the wall.

(b) ũkũtanĩ novaũũuk-ĩk-e.  
Wall can fly -STV-FV.  
The wall can be flown on /It is possible to fly on the wall.

In cases such as 82(b) above, pure intransitive verbs behave like the intransitives with an obligatory locative NP such as enda 'go to' as in (83) below:

(83) (a) Mũli nĩwaenda usĩnĩ.  
Muli go to river.  
Muli has gone to the river.

(b) Usĩnĩ no vaend-ek-e/Usĩnĩ no kuend-ek-a.  
River can go to-STV-FV.  
The river can be gone to.

Example 83(b) above expresses the meaning of potentiality. Intransitive verbs with a locative can also express potentiality in the negative as shown in (84) and (85) below:

(84) Ukutanĩ vaiũũuk-ĩk-a.  
Wall NEG fly -STV-FV.  
The wall cannot be flown on.
(85) Úsínî vaiend-ek-a
River NEG go to -STV-FV
The river cannot be gone to.

When the stative affix is used with basic intransitive verbs, it is only
the meaning of potentiality both in the negative and the positive that is
expressed. The meaning of an accomplished state is not brought out in
these derived verbs. The patterns in 82(b), 83(b), (84) and (85) can be
described as:

Valency Structure I: Subject + V.

The stative derived verbs above are monovalent or $V^1$.

Verbs such as Kw’a ‘die’ and Kûma ‘bark’ which cannot take a
locative, do not take the stative affix. This is because the stative affix
requires divalent verbs as input. Mchombo (1993) claims that in
Chichewa, the stative affix cannot occur with basic intransitive verbs.

As seen in examples 82(b) and 83(b) above it is not so with Kikamba.

Monotransitive verbs, which have two elaborators readily accept the
stative affix. The resulting stative derived verbs express the meaning
of potentiality both in the negative and positive as well as the meaning
of an accomplished state as shown in example (86) below:
(86) (a) Mueni nǐwathooa īvuku.
Mueni buy book.
Mueni has bought a book.

(b) īvuku nǐūthoo-ek-a.
Book can buy -STV-FV.
The book can be bought/is buyable.

(c) īvuku yǐī yǐithoo-ek-a.
Book this NEG buy -STV-FV.
This book cannot be bought/is not buyable.

(d) īvuku nǐyathoo-ek-a.
Book got buy -STV-FV.
The book has got bought/It was possible to buy the book.

In (86) above, (b) and (c) express potentiality in the positive and negative respectively while (d) expresses an accomplished state. The structural patterns in these examples can be described as:

Valency Structure 1: Subject + V.

The passive derived verb is monovalent or V. 

Ditransitive verbs such as nēnga 'give' when used with the stative affix express the same meanings as the monotransitive verbs in (86) above as shown in (87) below:

(87) (a) Mueni niwanenga kana īliu.
Mueni give child food.
Mueni has given the child food.
(b) Kana kaa nīūneng-ek-a liu.
Child this can give -STV-FV food.
This child can be given food.

(c) Kana kaa kaineng-ek-a liu.
Child this NEG-give-STV-FV food.
This child cannot be given food.

(d) Kana kaa nīkaneng-ek-a liu.
Child this got give -STV-FV food.
This child has got given food/It was possible to give this child food.

In (87) above, (b) and (c) express potentiality while (d) expresses an accomplished state. These structural patterns can be described as:

Valency Structure 12: Subject + V + Object.

The stative derived verb is divalent or V^2.

The verbs in the intransitive/transitive category, when used intransitively only admit the stative affix when the verb is followed by an optional locative. When the verb has only one elaborator which is the subject, a stative construction is not possible. However, very few of these verbs take a locative NP hence the stative affix is very restricted with these verbs. We consider the verb koma 'sleep' in (88) below:
In (88) above, (b) shows that without a locative, a stative construction is not possible. In (c) and (d) a locative is present and the two constructions express the meaning of potentiality both in the positive and negative. The structural patterns in (c) and (d) can be described as:

Valency Structure 1: Subject + Verb.

The stative derived verb is monovalent or V^1. This is comparable to the basic intransitive verbs. When these verbs are used transitively the verb koma 'sleep' takes a cognate object and a stative construction is not possible as in 89(b) below

(89) (a) Kana nǐkakoma too.  
child sleep sleep.  
The child has slept sleep.

(b) *Too noǐkom-ek-a.
As seen in 89(b) above, a cognate object cannot occupy the subject position in a stative construction hence the construction is ill-formed.

With the verbs in this category that do not take cognate objects such as ina 'sing' a stative construction is possible when the verb is used transitively as in 90(b) below.

(90)  
(a) Syana nisyaina wathi.  
Children sing song.  
The children have sung a song.  

(b) Wathi úun nowin-ík-e.  
Song this can sing -STV-FV.  
This song is singable/It is possible to sing this song.  

(c) Wathi úun ndwin-ík-a  
Song this NEG sing -STV-FV.  
This song cannot be sung.

In (90) above, (b) and (c) express potentiality both in the positive and in the negative respectively. These structural patterns can be described as:

Valency stucture 1: Subject + V.

The stative derived verb is monovalent or V1.

Considering the examples above, we concur with Givon (1990) that the stative affix is semantically state resultive, since, as we have noted, it either expresses potentiality of assuming a certain state or an
accomplished state. It is also fully promotional in that it promotes the
NP that occupies the object position to the subject position in a stative
construction.

We also conclude that this morpheme is valency reducing and it
reduces the valency of the basic verb by deleting the agent/doer. In
this aspect it is comparable to the passive morpheme. However, the
two affixes differ in that while the passive can occur with intransitive
verbs with one elaborator, the stative affix cannot. The stative affix
seems to accept only verbs with two elaborators as input. Hence the
stative affix seems to be more restricted than the passive affix. They
also differ in that, with the passive it is possible to express the agent
optionally while with the stative such a possibility is not available. In
other words the stative affix expresses a spontaneous event while the
passive presupposes an agent. Another difference is that with the
passive, after reduction to $V^1$ the one elaborator present can be
expressed as either subject or object while the stative only reduces to
$V^1$ a verb that has two elaborators and the one elaborator left only
occupies the subject position.
Zero-valent verbs and intransitive verbs do not accept the stative affix. The stative affix attaches to verbs that have at least two elaborators. Intransitives with an obligatory locative NP are reduced from divalent to monovalent. The verbs which can be used both intransitively and transitively, when used intransitively do not accept the stative affix but when used transitively they are reduced from divalent to monovalent. Monotransitive verbs are reduced from divalent to monovalent while distransitive verbs change from trivalent to divalent.

4.1.5 Summary

From this section of singly derived verbs we conclude that the applicative and the causative affixes increase the valency of the basic verb by one while the stative and the passive affixes reduce the valency of the basic verb by one. The stative is a rather restricted morpheme since it does not occur with the basic intransitive verbs unless a locative is present. Of these four affixes, only the applied can occur with the zero-valent verbs and this happens when two applied affixes occur together. This implies that all the others except the stative require verbs with at least one elaborator as input. The stative
requires verbs with at least two elaborators as input. This information is summarised in Table 4 below which shows the effects of the four affixes on the valency of the basic verb.

TABLE 4: The Effects of the Causative, Applicative, Passive and Stative Affixes on the Valency of the Basic Verb.

<table>
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<td>BASIC</td>
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<tr>
<td>Zero-valent</td>
<td>Zero-valent</td>
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<tr>
<td>Intransitive</td>
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<td>Monovalent/ Divalent/ Trivalent</td>
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<td>Divalent</td>
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<td>Ditransitive</td>
<td>Trivalent</td>
</tr>
</tbody>
</table>

Note: * Only the verbs that have two elaborators pattern with the stative affix.

4.2.0. Multiply Derived Verbs

This section deals with the multiply derived verbs and it has two sub-sections. In one of the sub-sections we discuss cases of doubling one affix in one base verb and the effect of the two affixes on the valency of
the basic verb. We tackle each affix independently considering its possibility of doubling in one verb. In the other sub-section we examine cases of co-occurrence of different affixes in one verb and the effect of the multiple derivation on the valency of the basic verb. At the end of the section (i.e on page 151), a table is provided as a summary of our observations.

4.2.1.0 Doubling of the Affixes

This sub-section covers four areas: the double causative, the double applicative, the double passive and the double stative. However, it is not all of these affixes that can double in one verb but each has been discussed showing why it can or cannot double.

4.2.1.1. The Double Causative

The causative affix, as noted in 4.1.1, is valency increasing and it increases the valency of the basic verb by one (See Table 4). It has the semantic role of introducing a causer in a clause.

After testing the causative morpheme on the basic verb, we observe that Kikamba unlike other Bantu languages like Gikuyu, as discussed in
Mwangi and Kioko (1998), does not allow double morphological causative. If two causative affixes occur in the same verb the resulting derived verb is semantically uninterpretable as in (91) and (92) below:

(91) *Mueni ṉwamanth-ith-îthy-a mwalimu kana kalamu.

(92) *Mueni ṉwavalûk-ith-îthy-a Nzisa kana.

Examples (91) and (92) above are not possible in Kikamba. The causative affix introduces a causer into a clause and it (the causer) cannot be doubled. Doubling it would mean having two causers in one clause which produces ill-formedness. Double causation in Kikamba is expressed by use of bi-clausal constructions such as tuma 'make do' or lasimîthya 'force to do' as in (93) and (94) below.

(93) Mueni atuma Nzisa avaluk-îthy-a kana.
    Mueni make Nzisa fall -CAUS-FV child.
    Mueni has made Nzisa make the child fall.

(94) Mueni alasimîthya mwalimu akun-îthy-a musyai kana.
    Mueni force teacher beat -CAUS-FV parent child.
    Mueni has forced the teacher to make a parent beat the child.

4.2.1.2. The Double Applicative

The applictive affix in Kikamba as described in section 4.1.3 is realized as -efi-, -el-/îl- or -sy-. This affix is very productive and occurs with
virtually all verbs in Kikamba. In an earlier section, we examined verbs with one applied affix and one applied elaborator. Here, we examine verbs with more than one affix and determine the number of elaborators the derived verb attracts to the clause. Unlike the causative affix, double applicative can be marked morphologically in Kikamba. We start by looking at basic intransitive verbs. Zero-valent verbs such as \textit{ua} 'rain' accept the double applicative affix as in (95) below:

(95) Mbua n\textit{\textipa{nyau}-\textipa{\textipa{\textipa{\textipa{\textipa{i}}}-\textipa{a}}}} syana.

Rain rain -APP-APP-FV children.
The rain has rained on the children.

The two applied affixes attract one new elaborator into the clause and the cognate subject becomes obligatory. This pattern can be described as:

Valency structure 12: Subject + V + Object.

The doubly derived applicative verb is divalent or \( V^2 \).

The elaborator \textbf{Mbu} a 'rain' is a cognate subject while \textit{syana} 'children' is a maleficiary NP. In section 4.1.3 we noted that one applied affix cannot pattern with zero-valent verbs because it requires monovalent verbs as input.
Monovalent intransitive verbs such as thama 'migrate' pattern with two applied affixes as in (96) below:

(96) Kīveti kyatham-ī-ī-a ndunyu thīna.
Woman migrate -APP-APP-FV market poverty.
The woman has migrated to the market because of poverty.

The new elaborator ndūnyū 'market' and thīna 'poverty' are locative NP and motive NP respectively. The pattern in (96) above can be described as:

Valency structure 133: Subject + V + Objoid + Objoid.

The doubly derived applicative verb is trivalent or V³.

The two applied affixes when used with intransitive verbs introduce elaborators with the semantic roles locative and motive.

(97) Mūtna athukūm-ī-ī-a nyinyia mūtīndani nthoni.
Mutua work -APP-APP-FV mother shamba shame.
Mutua has worked at the shamba for the benefit of his mother because of shame.
This pattern can be described as:

Valency structure 1253: Subject + V + Object + Locative (basic)

The doubly derived applicative verb here is tetravalent or $V^d$.

The elaborators introduced here nyinyia 'mother' and nthoni 'shame' have the semantic roles beneficiary and motive respectively. The beneficiary NP occupies the position of the primary object in Bantu languages while the motive NP occurs after the locative NP. Kioko (1994) states that up to three applied affixes can occur with one intransitive verb with a locative. We agree with her view and exemplify it by using the verb thūkūma 'work' as in (97) above. See (98) below:

(98) Mūtūa athukum-ī-ī-a Mūli nyinyia mūūndani nthoni.
Mutua work -APP-APP-APP-FV Muli mother shamba shame.
Mutua has worked at the shamba for the benefit of Muli's mother because of shame.

The new elaborator Mūli is a possessor hence the three applied affixes introduce three applied arguments to the clause. The pattern in (98) above can be described as:

Valency structure 12253: Subject + V + Object + Object + Locative (basic) + Objoid.
The trebly derived applicative verb is pentavalent or $V^5$.

Kioko (1994) also states that an intransitive verb with a locative can take three applied affixes and four applied elaborators where the fourth elaborator is optional hence the valency of the derived verb does not change as in (99) below:

(99) Mutua athukum-î-i-a Muli nyinyia kana muündani nthoni.
Mutua has worked -APP-APP-APP-rv Muli mother child shamba shame.
Mutua has worked in the shamba for the benefit of Muli's mother's child because of shame.

When the fourth elaborator kana 'child' is introduced it becomes a beneficiary NP and the meaning of possessor is doubled in the elaborators Muli and nyinyia 'mother'. This fourth elaborator is not attached to any affix hence it can be left out. Monotransitive verbs behave like the intransitivves with a locative in relation to the double and tripple applicative constructions as indicated in Kioko (1994:305). When used with two applied affixes, the applicative derived verb is tetravalent while when used with three applied affixes it is pentavalent. Ditransitive verbs such as nenga 'give' accept two applied affixes and two elaborators. They also accept three applied affixes and three applied elaborators as shown in (100) and (101) below.
(100) Mûeni aneng-e-e-a Nzisa kana lfu nza.
Mueni give -APP-APP-FV Nzisa child food outside.
Mueni has given the child food for the benefit of Nzisa while outside.

The new elaborators Nzisa and nza 'outside' have the semantic roles beneficiary and locative respectively. This structural pattern can be described as:

Valency structure 12223: Subject + V + Object + Object + Object + Objoid.

The doubly derived applicative verb is pentavalent or $V^5$. The beneficiary elaborator takes the position closest to the verb while the locative elaborator occurs after all the objects.

Mueni give -APP-APP-APP-FV Nzisa child food outside poverty.
Mueni has given the child food for the benefit of Nzisa while outside because of poverty.

The latest elaborator in (101) above, ńkya 'poverty' has the semantic role motive.

This structural pattern can be described as:

Valency structure 122233: Subject + Verb + Object + Object + Object + Objoid + Objoid.

The trebly derived applicative verb is hexavalent or $V^6$. 
The verb *nenga* 'give' can also be used in a construction where there are three applied affixes and four applied elaborators but the fourth elaborator is not attached to any affix hence it is optional as shown in (102) below.

(102) Mũeni aneng-e-e-e-a Nzisa nyinyia kana liu nza.
ūkya.
Mueni give APP-APP-APP-FV Nzisa mother child food outside poverty.
- Mueni has given the child food for the benefit of Nzisa's mother while outside because of poverty.

The new elaborator *nyinyia* 'mother' introduces the semantic role of possessor.

The verbs that are used both transitively and intransitively take up to two applied affixes and two applied elaborators when used transitively as shown in (103) beow.

(103) Kīveti kyavoy-e-e-a nyũmba wĩa.
Woman pray -APP-APP-FV house fear.
The woman prayed while in the house because of fear.

These verbs also take a series of three applied affixes and three applied elaborators when used transitively as shown in example (104) below.

(104) (a) Kīveti kyavoy-e-e-a mūndǐ mboya nzeo nyũmba.
Woman pray -APP-APP-FV person prayer good house.
The woman prayed a good prayer for the benefit of someone while in the house.
(b) Kíveti kyavoy-e-e-e-a mündū mboya nzeo nyūmba w'ia. Woman pray -APP-APP-APP-FV person prayer good house fear.

The woman prayed a good prayer for the benefit of someone while in the house because of fear.

In (103) the verb voya 'pray' has been used intransitively and the two applied elaborators nyūmba 'house' and w'ia 'fear' have the semantic roles locative and motive respectively. This structural pattern can be described as:

Valency Structure 133: Subject + V + Objoid + Objoid.

The doubly derived applied verb is trivalent V^3.

In example (104), the verb has been used transitively and the new elaborator mündū 'person' is a beneficiary. In 104(a) two applied affixes have been used and the structural pattern can be described as:

Valency Structure 1263: Subject + V + Object + Cognate Object + Objoid.

The doubly derived applied verb is tetravalent. In 104(b) three applied affixes have been used and the structural pattern can be described as:

Valency Structure 12633: Subject + V + Object + Cognate Object + Objoid + (Locative) + Objoid (Motive).

The triply derived applied verb is pentavalent or V^5.
From all the examples above, we note that the applicative affix does not only double but it also trebles. Hence the observations made above can be expressed as:

\[ X^n + \text{APP} = x^{n+1} \]
\[ X^n + \text{APP} + \text{APP} = x^{n+2} \]
\[ x^n + \text{APP} + \text{APP} + \text{APP} = x^{n+3} \]

This therefore means that one applied affix cannot introduce two applied elaborators neither can two applied affixes introduce three applied elaborators. Such constructions would be ill-formed as in (105) and (106) below:

(105) *Mwalimu akūn-i-a kana sukulu ngūlū.

(106) *Mwalimu akun-i-i-a kiveti kana sukulu ngūlū.

As shown in (99) and (102) above, it is possible to have three applied affixes and four applied elaborators where one is optional

The applicative affix, which is similar to the causative affix in that they both increase the valency of the basic verb by one, can be doubled and even trebled while the causative affix cannot. This is due to the following reasons:
1) The verb elaborators introduced by the applied affix express a number of semantic roles such as beneficiary/maleficiary, locative, possessor, and motive while the causative affix introduces a causer only.

2) Some of the meanings expressed by the applied elaborators can be doubled. For example beneficiary and possessor as in (107) below:

(107) Mueni amanth-i-i a mwalimu kana ivuku.
Mueni has searched for a book for the benefit of the teacher's child.

In (107) above, mwalimu 'teacher' and kana 'child' are both beneficiaries.

The use of the three applied affixes has been referred to as the multiple applicative by Kioko (1994). As noted above, the applicative morpheme attracts to the clause elaborators with different semantic roles expressing a possibility that the applicative morphemes are different but with the same form.
4.2.1.3. The Double Passive

The passive morpheme realized as -w- in Kikamba is valency reducing. It reduces the valency of the basic verb by one as shown in Table 4. After testing two passive morphemes in one basic verb, the resulting derived verb is semantically uninterpretable as in 108(c) below:

(108) (a) Mueni niwamantha ñvuku.
Mueni search for book.
Mueni has searched for a book.

(b) ñvuku niyamanth-w-a (ni Mueni).
Book search for -PASS-FV by Mueni).
A book has been searched for (by Mueni)

(c) *Nïyamanth-w-w-a

The construction in 108(c) above has two passive affixes within the verb and it is not possible in Kikamba. The passive affix reduces divalent verbs to monovalent and a second passive affix would reduce it to a zero-valent verb, if zero-valent verbs do exist in the language.

Ditransitive verbs such as nenga 'give', if derived by two passive affixes, would have their valency reduced from V² to V¹ but the derived verb will be semantically uninterpretable as in 109(c) below.
(109) (a) Mũeni nîwanenga Mwende Mũthînţjo.
Mueni give Mwende present.
Mueni has given Mwende a present.

(b) Mwende nîwaneng-\textsuperscript{w}-a Mũthînţjo (nĩ Mũeni).
Mwende give –PASS-FV present (by Mueni).
Mwende has been given a present (by Mueni).

(c) *Mũthînţjo nîwaneng-\textsuperscript{w-\textsuperscript{w}}-a.

Hence, we conclude that, although the valency of the Kikamba verb can be increased twice and even thrice (see section 4.2.1.2), it cannot be reduced twice. For instance, if a monovalent verb is reduced twice, the valency of the resulting derived verb would be zero and this is not possible in Kikamba. We would, however, have expected that divalent verbs would take double passive since the result would be a monovalent verb. The fact that this is unacceptable as in example 109(c) shows that the language disallows double reduction. Therefore, due to a restriction in Kikamba against two passive morphemes in one verb, the double passive cannot be expressed either morphologically or lexically. The passive mainly reduces the agent and it is not possible to have two agents in one construction.
4.2.1.4 The Double Stative

The stative morpheme in Kikamba, which is realized as -ek- or -ik-, like the passive morpheme, reduces the valency of the basic verb by one. On testing two stative affixes on one verb, we realized that the double stative is not possible in Kikamba as in 110(c) below:

(110) (a) Mueni niwathooa kalamu.
Mueni buy pen.
Mueni has bought a pen.

(b) Kalamu ka noithe-ek-a.
Pen this buy -STV-FV.
This pen is buyable/can be bought.

(c) *Noithe-ek-ek-a.

Example 110(c) above shows that once the stative affix has reduced by one as in 110(b), further reduction is not possible. In section 4.1.4, we noted that a basic verb with at least two elaborators readily accepts the stative morpheme. However, such verbs which are basically divalent if reduced to zero-valent verbs, would give rise to a semantically ill-formed derived verb. Basic verbs with three elaborators such as nenga 'give' if reduced twice by the stative affix, give rise to a semantically uninterpretable derived verb as in 111(c) below:
Hence the stative affix is comparable to the passive affix which is also valency reducing in that it cannot double. From our data collection, we observed that Kikamba has fewer zero-valent and intransitive verbs than transitive verbs (see Table 2). This may explain why the language does not allow double reduction i.e. it prefers verbs with at least two elaborators. This further supports the fact that intransitive verbs in Kikamba do not accept the stative affix. The language seems to block both double passive and double stative.

4.2.1.5. Summary

In this sub-section, we conclude that Kikamba has various restrictions with regard to the doubling of affixes. Of the four affixes discussed, it is only the applicative affix that can double and even treble. This is because the applicative affixes introduce elaborators with different
semantic roles such as beneficiary, possessor, locative motive and experiencer. Thus, the presence of two applicative affixes signals the presence of two elaborators, generally with different roles. On the other hand, the causative introduces an elaborator which is a causer and has the semantic role of agent and thus a sentence with two causers becomes difficult to interpret. The stative affix reduces the doer or agent in a clause. This indicates that in Kikamba we cannot have two agents in a clause. Thus double reduction of agent is not possible. The applicative affix, therefore, seems to be the most productive in Kikamba.

4.2.2.0 Co-occurrence of Verbal Affixes

In this sub-section, we discuss the issue of co-occurrence of the affixes. All the four affixes have been considered noting cases of any two or three different affixes occurring together in one verb and determining the valency of the multiply derived verb. There are, however, order and co-occurrence restrictions in a similar way as Polome (1967:91-94) has noted for Swahili verb affixes. Hence this sub-section comprises seven areas which include all the possibilities of the affixes to occur together. A table is provided at the end of the sub-section showing the effect of the co-occurrence of the affixes on the valency of the verb.
4.2.2.1 The Applicative-Causative Derived Verb

The applicative and the causative affixes which are valency increasing can occur together in one verb. When these two affixes co-occur, the causative appears before the applicative. In constructions where these two affixes co-occur, two new elaborators are added to the clause. The causative affix introduces an elaborator which is a causer while the applicative affix introduces an elaborator which is either a locative, a motive, a beneficiary or a possessor.

Considering basic intransitive verbs, zero-valent verbs such as *ua 'rain' do not accept these two affixes together. These two affixes require monovalent verbs as input (see 4.1.2.). If these two affixes are used with zero-valent verbs the resulting derived verb is semantically ill-formed as shown in (112) below:

(112) *Mũeni au-īṭhī-sy-a kana mbua.

Monovalent verbs such as *thama 'migrate' allow the co-occurrence of these two affixes as in below:

(113) Mūli athīm-īṭhī-sy-a kīveti thīna.
    Muli migrate -CAUS-APP-FV woman poverty.
    Muli has made the woman migrate because of poverty.
In (113) above, the causative affix introduces the agent Miili while the applicative affix introduces the elaborator thīna 'poverty' which has the semantic role of motive. This structural pattern can be described as:

Valency structure 123: Subject + Object + Objoid (Motive).

The causative-applicative derived from mono-transitive basic verbs is trivalent or \( V^3 \).

Some basic intransitive verbs such as valūka 'fall' and ūlūka 'fly' when used with these two affixes become valūkīlya and ūlūkīlya respectively. In this case, the causative affix is realized as -y- while the applicative is realized as -īl-. This is due to phonological processes in the language. Here the applicative occurs before the causative. When intransitives with a locative are used with these two affixes, the locative becomes obligatory as shown in (114) below.

(114) Mutūa athūkūm-īthī-sy-a Miili mūūndani kīmena. Mutua work CAUS-APP-FV Muli shamba hatred. Mutua has made Muli work at the shamba because of hatred.

This structural pattern can be described as:

Valency structure 1253: Subject + V + Object + Locative NP (basic) + Objoid (Motive).
The causative-applicative derived verb is tetravalent $V^4$.

Basic transitive verbs such as mantha 'search for' accept the two affixes as shown in (115) below:

(115) Miieni ulwamanth-Ithi-sy-a kana Ivuku nyũmba.
Mueni search for -CAUS-APP-FV child book house
Mueni has helped the child look for a book while in the house.

The new elaborators are Můeni 'causer' and nyũmba 'house' which is a locative. The structural pattern can be described as:

Valency structure 1223: Subject+V+Object+Object+Objoid (Locative).

The causative-applicative verb derived from transitive verbs is tetravalent or $V^4$.

Ditransitive verbs such as nenga 'give' also have their valency increased by two as shown in (116) below:

Mueni give -CAUS-APP-FV Mwende Nzisa child food.
Mueni has helped Mwende give the child food for the benefit of Nzisa.

(b) Můeni niwaneng-ethe-sy-a Nzisa kana lũu.
Mueni give CAUS-APP-FV Nzisa child food.
Mueni has helped someone to give the child food for the benefit of Nzisa.
The new elaborators here are **Mụeni** which is a causer and **Nziza** which is a beneficiary and also causee.

The structural pattern can be described as:

Valency Structure 12222: Subject + V + Object + Object + Object + Object.

The causative-applicative derived verb is pentavalent \( V^5 \).

We notice that in ditransitive causative-applied derived verbs, as in 116(\( \ddot{c} \)) above, the causee can be dropped.

The verbs that are used both transitively and intransitively also occur with the two affixes as shown in (117) and (118) below with the verb **koma** 'sleep'

(117) Mwende akom-ethe-sy-a kana mĩnoo.
Mwende sleep -CAUS-APP-FV child tiredness.
Mwende has made the child sleep because of tiredness.

This structural pattern can be described as:

Valency Structure 123: Subject + V + Object + Objoid (Motive)

The causative applicative derived verb from intransitive/transitive verbs is trivalent or \( V^3 \).

(118) Mwende akom-ethe-sy-a kana too mĩnoo.
Mwende sleep-CAUS-APP-FV child sleep tiredness.
Mwende has made the child sleep sleep because of tiredness.
The new elaborators here are Mwende and minoo 'tiredness' which have the semantic roles of agent and motive respectively. This structural pattern is described as:

Valency Structure 1263: Subject + Object + Cognate Object + Objoid (Motive).

The causative applicative derived verb is tetravalent or \( V^4 \).

Therefore, when the causative and the applicative affixes occur together, the valency of the basic verb increases by two. This can be expressed as:

\[
X^n + \text{CAUS} = X^{n+1}
\]
\[
X^n + \text{APP} = X^{n+1}
\]
\[
X^n + \text{CAUS} + \text{APP} = X^{n+2}
\]

Thus, they increase the valency of monovalent verbs to trivalent and divalent verbs to tetravalent while trivalent verbs become pentavalent.

4.2.2.2 The Passive-Stative Derived Verb

The passive and the stative affixes are both valency reducing. In 4.2.1.0 we noted that none of these two affixes can be doubled. After testing the co-occurrence of these two affixes in one verb, it was noted that they cannot co-occur. As we noted earlier both are agent deleting. Thus,
when one has occurred it removes the agent and so the other cannot occur in the same structure. When the two affixes are used in one verb the resulting derived verb is semantically uninterpretable as shown in 119(b) below.

(119) (a) Mwalimu niwakūna kana.
Teacher beat child.
The teacher has beaten a child.

(b) *Niūkūn-īk-w-a.

(c) *Niūkūn-w-īk-a.

These observations concur with the comments made in Mchombo (1993) that in Chichewa the two affixes cannot co-occur.

4.2.2.3 The Causative-Passive Derived Verb:

When the causative and the passive affixes occur together, the causative occurs before the passive. Polome (1967) notes that when the passive affix co-occurs with other affixes it always comes last. The causative affix increases the valency of the basic verb by one while the passive affix reduces the same by one. Hence the valency of the causative passive derived verbs is the same as that of the basic verb. These two affixes bring out the meaning of 'being caused to perform an action'.
Zero valent verbs do not accept these two affixes. The resulting derived verb in such a case would be semantically ill-formed as in (120) below:

(120) *U-ǐth-w'-a.

Monovalent verbs such as kūma 'bark' allow the co-occurrence of these two affixes as in

(121) below:

(121) Ngitī nīyakūm-ǐth-w'-a (nī Mūtūa).
   Dog bark-CAUS-PASS-FV (by Mūtūa).
   The dog has been made to bark by Mutua.

This pattern can be presented as:

Valency Structure I: Subject + V.

The causative-passive derived verb is monovalent or V[^1].

When intransitive verbs with an optional locative NP take these two affixes the locative NP becomes obligatory as in (122) below.

(122) Mūli nīwathukum-ǐth-w'-a mūndanī (nī mwalimū).
   Muli work-CAUS-PASS-FV shamba (by teacher).
   Muli has been made to work at the shamba by the teacher.

The causative affix introduces an elaborator Mwalimū 'teacher' which is a causer and it is reduced by the passive affix hence this structural pattern can be described as:

Valency Structure I: Subject + V.
The causative-passive derived verb from intransitive verbs is monovalent or $V^1$.

Monotransitive verbs which are basically divalent retain their valency when derived using these two affixes as in (123) below:

(123) Kana nǐkatheel-eth-w'-a mūvīla (nī mwalimū).
Child kick-CAUS-PASS-FV ball (by teacher).
The child has been made to kick a ball (by the teacher).

The agent mwalimū 'teacher' is introduced by the causative affix and reduced by the passive affix hence the valency structure remains the same as that of the basic verb.

Valency structure 12: Subject + V + Object.

The causative-passive derived verb from monotransitive verbs is divalent or $V^2$.

Some verbs in this category such as likana 'remember' and ekea 'forgive' would result into semantically ill-formed derived verbs if used with the two affixes as shown in (124) below.

(124) *Mūsyai nǐwaekte-eth-w'-a kana (nī mwalimū).

The derived verb ekeethw'a 'be made to forgive' above is semantically ill-formed because forgiving is an emotional process that cannot be
affected by a causer while *lilikanw*a 'be made to remember' is a mental process which likewise cannot be influenced by a causer.

Ditransitive verbs such as *nenga* 'give' also retain their basic valency if used with the two affixes as shown in (125) below:

(125) Mu′eni nįwaneg-eth-w'-a kana lįu (ni Nziša).
    Mu′eni give-CAUS-PASS-FV child food (by Nziša).
    Mu′eni has been made to give the child food (by Nziša).

This structural pattern can be described as:

Valency structure 122: Subject + V + Object + Object.

The causative-passive derived verb from ditransitive verbs is trivalent or \( V^3 \).

The verbs that are used both transitively and intransitively also admit the two affixes as seen with the verb *ina* 'sing' in (126) and (127) below

(126) Andū nįmain-Ith-w'-a (ni muvea).
    People sing-CAUS-PASS-FV (by priest).
    The people have been made to sing by the priest.

(127) Andū nįmain-Ith-w'-a wathi (ni mũvea).
    People sing-CAUS-PASS-FV song (by priest).
    The people have been made to sing a song (by the priest).

In (126) the verb *ina* 'sing' is used intransitively while in (127) it is used transitively. The structural pattern in (126) can be described as:

Valency Structure 1: Subject+V.
The causative-passive derived verb is monovalent or $V^1$.

The structural pattern in (127) can be described as:
Valency Structure 12: Subject + V + Object.

The causative-passive derived verb is divalent or $V^2$.

Example (126) can also be rephrased as:

(128) Nīkwain-īth-w'-a andū (nī mūvea).
There sing-CAUS-PASS-FV people (by priest).
There has been made people to sing (by the priest).

Example (127) can be rephrased as:

(129) Nīkwain-īth-w'-a andū wathi (nī muvea).
There sing-CAUS-PASS people song by priest.
There has been made people to sing a song by the priest.

The valency structures in (128) and (129) differ from those in (126) and (127) respectively but the valency does not change. The structural pattern in (128) can be described as:

Valency Structure 02: $\emptyset + V + \text{Object}$.

The Structural pattern in (129) can be described as:

Valency Structure 022: $\emptyset + Y + \text{Object} + \text{Object}$.

Some verbs in this category which involve mental processes such as ota 'dream' and thūmūa 'rest' give rise to semantically unintepretable derived verbs if used with these two affixes as shown in (130) below:

(130) *Kana nīkaot-eth-w'-a ndoto (nī nyinyia).
Processes such as 'dreaming' and 'resting' cannot be affected by a causer. Therefore, from the observations made above the effect of the causative and passive affixes on the valency of the basic verb can be expressed as:

\[ X^{n+\text{CAUS}} = X^{n+1} \]
\[ X^{n+\text{PASS}} = X^{n-1} \]
\[ X^{n+\text{CAUS}+\text{PASS}} = X^{n} \]

### 4.2.2.4 The Applicative-Passive Derived Verb

When these two affixes occur together, the applicative affix is positioned before the passive affix. The former just like the causative affix introduces a new elaborator into the clause while the latter reduces the agent in the clause in which the two affixes co-occur. The elaborators introduced by the applied affix have the semantic roles of either locative, motive and beneficiary. As said above, the applicative is realized as -\(\text{I}\) - or -\(\text{e}\) - while the passive is realized as -w-.

While considering the co-occurrence of these two affixes in the basic intransitive verbs, it was noted that zero-valent verbs do not pattern with
these two affixes. The resulting derived verbs would be semantically ill-formed as in (131) below:

(131) *Nīkwau-ī-w-a.

Monovalent intransitive verbs such as thama 'migrate' allow the co-occurrence of these two affixes as shown in 132(a) below:

(132) (a) Kwatham-ī-w-a nzaa (nī andū).
    There migrate-APP-PASS-FV famine (by people).
    Migrating has been done because of hunger (by people).

(b) *Nzaa nīyatham-ī-w-a (nī andū).

In (132) above, the applicative affix introduces the elaborator nzaa 'famine' which has the semantic role motive while the passive affix reduces the agent andū 'people'. Hence the structural pattern can be presented as:

Valency structure 03: ∅ + V + Objoid.

The applicative-passive derived verb is monovalent or V1.

It is important to note that 132(b) above is ill formed because nzaa 'hunger' cannot occupy the subject position since it is an abstract noun.

When the basic intransitive verb is followed by a locative, NP the locative NP occupies the subject position in the corresponding
applicative-passive construction as seen with the verb thûkûma 'work' in (133) below:

(133) (Mûûndanû) vathûkûm-î-w-a thîna (nî Mûli).
Shamba work at APP-PASS-FV poverty (by Muli).
Working at the shamba has been done (by Muli) because of poverty.

The applicative affix introduces the motive elaborator thîna 'poverty'.
Hence the valency structure can be described as:

Valency structure 13: Subject + V + Objoid (Motive).

The applicative-passive derived verb is divalent or V^2.

An applicative-passive construction without a locative NP is possible with valency structure 03: Ø + V + Objoid as shown in (134) below:

(134) Vathûkûm-î-w-a thîna.
There work APP-PASS-FV poverty.
There has been worked because of poverty.

Monotransitive verbs such as kûna 'beat' permit the two affixes as shown in (135) below.

(135) Kana kakûn-î-w-a sukulu (nî mwalimuû).
Child beat-APP-PASS-FV school (by teacher).
The child was beaten while at school (by the teacher).

The applicative affix introduces the elaborator sukulu 'school' which has the semantic role of locative while the passive reduces the doer mwalimuû 'teacher'. The valency structure for this structural pattern is:
Valency Structure 13: Subject + V + Objoid.

The applicative-derived verb is divalent.

Monotransitive verbs can also give a structured pattern with a different valency structure when used with these two affixes as in (136) below:

(136) Kana kakūn-i-w-a kīveti (nī mwalimū).
Child beat-APP-PASS-FV woman (by teacher).
The child was beaten (by the teacher) for the benefit of the woman.

This structural pattern can be described as:

Valency Structure 121: Subject+V+Object.

The applied affix introduces the beneficiary kīveti 'woman' and the passive affix reduces the agent mwalimū 'teacher'.

Ditransitive verbs such as neoga 'give' allow the co-occurrence of the two affixes as in (137) below:

(137) Nzisa aneng-e-w-a kana līu (nī Mūeni).
Nzisa give -APP-PASS-FY child food (by Mueni).
The child has been given food (by Mueni) for the benefit of Nzisa.

The applied affix introduces the beneficiary Nzisa while the passive affix deletes the agent Mūeni and this structural pattern can be presented as:

Valency structure 122: Subject + V + Object + Object.

The applicative-passive derived verb is trivalent or V³.
If the applied affix introduced an elaborator with the semantic role locative or motive the valency structure of the clause would be different but the valency will not change as in (138) below:

(138) Kana kaneng-e-w-a līu nza (nī Mueni).
Child give-APP-PASS-FV food outside by Mueni.
The child has been given food while outside (by Mueni).

The new elaborator nza 'outside' which is added by the applied affix is a locative and the elaborator Mueni which is the agent is reduced by the poassive affix hence the valency structure can be described as:

Valency structure 123: Subject + V + Object + Objoid

The verbs that are used both intransitively and transitively also retain their basic valency when used with the two affixes as shown in (139) and (140) below:

(139) (a) Mūsumbī nīwain-i-w-a (nī syana).
King sing -APP-PASS-FV (by children).
The king has been sung for (by children).

(b) Nīkwaín-i-w-a mūsumbī (nī syana).
There sing -APP-PASS-FV king (by children).
There has been sung for a king by children.

(140) (a) Mūsumbī niwain-i-w-a,wathi (nī syana).
King sing -APP-PASS-FV song (by children).
The king has been sung for a song (by the children).
(b) Nīkwain-Ī-w-a Mūsumbī wathi (nī syana).
There sing -APP-PASS-FV king song (by children).
There has been sung a song the benefit of a king (by children).

The structural patterns in 139(a) and (b) where the verb has been used
intransitively are:

(a) Valency Structure 1: Subject + V.
(b) Valency Structure 02: Ø + V + Object.

The applicative-passive derived verb is monovalent or V¹.

The structural patterns in (140) can be described as:

(a) Valency Structure 12: Subject + V + Object.
(b) Valency Structure 022: Ø + V + Object + Object.

The applicative-passive derived verb is divalent or V².

The elaborator mūsumbī 'king' which is introduced by the applied affix
expresses the meaning of beneficiary.

Therefore, it is notable that the verb derived using the applicative and
the passive affixes has the same valency as the basic verb. This is
comparable to what happens when the causative and the passive affixes
occur together. The effect of the applied and passive affixes on the
valency of the basic verb can be expressed as:
4.2.2.5. The Causative-Stative Derived Verb

In cases where these two affixes co-occur the causative occurs before the stative affix. As noted in 4.1.4, the stative affix is very restricted in Kikamba hence a number of verbs do not allow the co-occurrence of the two affixes. Some of the verbs which reject this co-occurrence are kw'a 'die', lilikana 'remember', sisya 'look', thūmūa 'rest', theka 'laugh', ota 'dream' among others. This is because they involve mental and natural processes. Zero-valent verbs which do not occur with any of the two affixes independently e.g. ua 'rain' do not permit the co-occurrence of the two affixes. Monovalent verbs such as valūka 'fall' which do not take the stative affix, allow the co-occurrence of the causative affix and the stative affix. The causative affix introduces a causer hence making the verb divalent and thus creating room for the stative affix as shown in 141(b) below:

(141) (a) Mūeni nīwavalūk-īthy-a kana.
Mueni fall -CAUS -FV -child.
Mueni has made the child fall.
The derived verb in 141(b) above has the meaning 'can be caused to be in a certain state'. The new elaborator in 141(a) i.e. Mūeni is a causer which has the semantic role of agent and it is reduced by the stative affix as seen in 142(b) below. This structural pattern is presented as:

Valency Structure 1: Subject + V.

The causative-stative derived verb is monovalent or V

When intransitive verbs with a basic locative occur with these two affixes, the locative NP is optional and the causee in the causative construction occupies the subject position as in 142(b) below:

(142) (a) Mūtua niwathūkūm-ǐthy-a Mūli muundanī.
Mutua work -CAUS-FV Muli shamba.
Mutua has made Muli work the shamba.

(b) Mūli niũ̃thūkūm-ǐth-ǐk-a.
Muli can work -CAUS-STV-FV.
Muli can be made workable.

This structural pattern is described as:

Valency Structure 1: Subject + V.

The causative-stative derived verb is monovalent or V

136
Monotransitive verbs such as theela 'kick' allow the co-occurrence of these two affixes as in (143b) below:

(143)-(a) Mwalimū niwatheel-ethy-a kana mūvīla.
Teacher kick-CAUS-FV child ball.
The teacher has made the child kick a ball.

(b) Mūvīla ūū ndūtheel-eth-ek-a.
Ball this NEG-kick-CAUS-STV-FV.
This ball cannot be made kickable.

This structural pattern can be described as:

Valency Structure 1: Subject + V

The causative-stative verb is monovalent or V₁.

Ditransitive verbs such as nenga 'give' when used with these two affixes result to semantically unintepretable derived verbs as in 144(b) below:

(144) (a) Nzisa niwaneng-ethy-a Mūeni kana līu.
Nzisa give-CAUS-FV-Mueni child food.
Nzisa has made Mueni give the child food.

(b) *Kana kaa kaineng-eth-ek-a.

We notice that when the stative affix occurs with the causative affix it reduces the number of elaborators to one and if the reduction to one is not possible as in 144(b) above, the resulting structure is ill-formed.
Most of the verbs in the intransitive/transitive category, as noted above, do not permit the occurrence of these two affixes. However, a few of the verbs such as ina 'sing' are exceptional as seen in (145) and (146) below:

Children these can sing -CAUS-STV-FV.
The children can be made to sing.

(146) Wathi ūnndwin-ĩth-ĩk-a.
Song this NEG-Sing -CAU-STV-FV.
This song cannot be made singable.

In (145) the verb has been used intransitively while in (146) it has been used transitively. The structural patterns above can be presented as:

Valency Structure 1: Subject+V

The causative-stative derived verb is monovalent or V₁.

Therefore when the causative and the stative affixes occur together, the valency of the basic verb that has at least two elaborators is reduced to one. Trivalent verbs, which must have at least two elaborators when derived, do not accept the occurrence of these two affixes. Hence the effect of the two affixes on the valency of the basic verb can be expressed as:
We notice that when a divalent verb occurs with the causative affix it becomes trivalent. When the stative affix is added to the verb it should become divalent but it becomes monovalent. This is because the stative affix takes divalent verbs as input.

4.2.2.6 The Stative-Applicative Derived Verb

When these two affixes occur together, the stative comes before the applicative. The resulting derived verb has the meaning of potentiality brought out by the stative and the meaning of locative or motive brought out by the new elaborator introduced by the applicative affix.

We start our discussion in this area with the basic intransitive verbs. Zero-valent verbs which are intransitive verbs with no elaborator do not allow the occurrence of these two affixes. Monovalent intransitive verbs such as kūma 'bark' permit the occurrence of the two affixes. When they do, the derived elaborator introduced by the applied affix becomes
the only elaborator present in the stative-applicative construction. The stative affix reduces the doer in this case as shown in 147(b) below:

(147) (a) Ngitī yakūm-ī-a nza.
Dog bark -APP-FV - outside.
The dog has barked while outside.

(b) Nza novakūm-Īk-ī-e.
Outside can bark -STV-APP-FV.
It is possible to bark while outside.

The derived locative NP nza 'outside' takes the subject position. This structural pattern can be described as:

Valency Structure 1: Subject + V.

The stative-applicative derived verb is monovalent or V

Intransitive verbs with a basic locative such as thūkūma 'work' allow the co-occurrence of these two affixes. When they do, the locative becomes obligatory and occupies the subject position while the object slot is occupied by the elaborator introduced by the applied affix as in (148) below:

(148) Mūūndanī nūthūkūm-Īk-ī-a thīnā.
Shamba can work -STV-APP-FV poverty.
It is possible to work at the shamba because of poverty.
The elaborator *thîna* 'poverty' introduced by the applied affix has the semantic role of motive. This structural pattern can be presented as:

Valency Structure 13: Subject + V + Objoid.

The stative-applicative verb is divalent or $V^2$.

Monotransitive verbs such as *kîna* 'beat' admit the two affixes as in (149) below:

(149) Kana kaa kaikîn-îk-î-a vaa.
    Child this -NEG-beat-STV-PASS-FV here.
    It is not possible to beat the child while here.

The elaborator *vaa* 'here' which is a derived locative is introduced by the applied affix hence the structural pattern in (149) can be described as:

Valency Structure 13: Subject + V + Objoid

The stative applicative derived verb is divalent or $V^2$.

Verbs with three elaborators in the basic form such as *nenga* 'give' allow the occurrence of the two affixes as in (150) below:

(150) Kana kaa noûneng-ek-e-a liu nza.
    Child this can give -STV-APP-FV food outside.
    It is possible for this to be given child food while outside.

The elaborator *kana* 'child' which occurs immediately after the verb in the basic form occupies the subject position when the verb is derived using these two affixes while the locative *nza* 'outside' which is
introduced by the applied affix occur after līu 'food' which is also an object. This structural pattern can be described as:

Valency Structure 123: Subject + V + Object + Objoid.

The stative-applicative verb is trivalent or $V^3$.

The verbs that can be used both intransitively and transitively also allow the occurrence of these affixes as in (151) and (152) below:

House can pray-STV-APP-FV.  
It is possible to pray while inside the house.

(152) Mboya ndasa īivoy-ek-e-a nyūmba.  
Pray long NEG-pray-STV-APP house.  
It is not possible to pray a long prayer while in the house.

In (151) the verb has been used intransitively and the locative NP nyūmba 'house' introduced by the applied affix occupies the subject position. This structural pattern can be described as:

Valency Structure 1: Subject + V.

The stative applicative derived verb is monovalent. In (152) the verb is used transitively and the cognate object mboya 'prayer' occupies the subject position while the locative nyūmba 'house' introduced by the applied affix occurs after the verb. This structural pattern can be described as:
Valency Structure 12: Subject + V + Object.

The stative applicative derived verb is divalent. The effects of these two affixes on the valency of the basic verb can be expressed as:

\[
X^n + \text{APP} = X^{n+1}
\]
\[
X^n + \text{STV} = X^{n-1}
\]
\[
X^n + \text{APP+STV} = X^n.
\]

The applicative affix increases the valency of the basic verb by one while the stative affix reduces it by one. Hence the resulting stative applicative derived verb has the same valency as the basic verb. This is comparable to what happens when the causative and stative affixes occur together. However, the co-occurrence of the applied and stative affixes is more productive than the co-occurrence of the causative and stative affixes. This is because, as noted in 4.2.2.5, while the applied affix introduces elaborator with different semantic roles, the causative affix introduces an element with only one semantic role of agent. Hence the co-occurrence of the causative and stative affixes is thus restricted.
There seems to be a restriction regarding the semantic roles of the NPs introduced by the applied affix when it occurs with the stative affix. NPs with the semantic role of locative seem to be the most favoured NPs with the semantic role of motive also occur with the stative affix while the applied affix does not introduce NPs with the semantic roles of beneficiary and possessor. This is because as noted in example 132(b) above these are elaborators which can not the subject position in the corresponding passive construction. Such elaborators have been referred to as objoids.

Zero-valent verbs do not allow the occurrence of these two affixes. All the verbs in other categories allow the co-occurrence of the two affixes and their valency remains the same. Even the intransitive verbs which do not take the stative affix in their basic form, take the two affixes. This is because the applied affix makes them divalent hence making them readily accept the stative affix which reduces them to monovalent.
4.2.2.7 The Causative-Applicative-Passive Derived Verb

These three affixes occur together within a verb in the order causative, applicative and passive. When the causative and the passive affixes occur as noted in 4.2.2.3 the valency of the derived verb is the same as that of the basic verb. The same happens when the applicative and the passive co-occur. When the three affixes co-occur, the valency of the derived verb is higher than that of the basic verb by one. The two valency increases affixes increase the valency of the verb by two while the passive reduces it by one. These three affixes derive a verb with the meaning of 'being caused to perform an action while at a particular place, or for particular reason or for the benefit of a particular person'. In the cases of co-occurrence, the causative is realized as -ithi- while the applicative is realized as -I- or -e- and the passive as -w-. However, the -I- or -e- of the applied affix glides into the -u- of the passive morpheme and the two are realized as w' which is a labialized /w/ according to Kioko (1994).

In our discussion, we start with the basic intransitive verbs such as ua 'rain' and thama 'migrate'. Zero-valent verbs such as ua 'rain' do not
permit the co-occurrence of the three affixes. The resulting derived verb would be semantically uninterpretable as in (153) below:

(153) *Níkwau-íth-í-w'-a mbua.

Movement intransitive verbs such as thama 'migrate' allow the co-occurrence of these three affixes as in (154) below:

(154) Kíveti kyatham-íth-í-w'-a nzaa (nī Mútua).
Woman migrate -CAUS-APP-PASS-FV famine (by Mutua).
The woman has been made to migrate because of famine (by Mutua).

The causative affix introduces the elaborator Mútua which has the semantic role agent and is reduced by the passive affix while the applied affix introduces nzaa 'famine' which has the semantic role motive and occurs after the verb in the construction. The structural pattern in (154) is described as:

Valency Structure 13: Subject + V + Objoid.

The causative-applicative-passive derived verb is divalent or V².

When basic intransitive verbs with an optional locative take these three affixes, the locative becomes obligatory and it occurs after the verb as in (156) below:
Mutua has been made to work at shamba because of poverty.

This structural pattern can be described as:

Valency Structure 153: Subject + V + Locative (basic) + Objoid.

The causative-applicative-passive derived verb is trivalent or $V^3$.

Monotransitive verbs such as kūna 'beat' take these three affixes as in (156) below:

(156) Mūsyai akūn-īth-ī-w'-a kana ngūlū (nī mwalimū).
The parent has been made to beat the child because of stubbornness (by the teacher).

This pattern is described as:

Valency Structure 123: Subject + V + Object + Object.

The causative-applicative-passive derived verb is trivalent or $V^3$.

Ditransitive verbs which are basically trivalent become tetravalent when used with these affixes as in (157) below:

(157) Mūeni aneng-eth-e-w'-a kana līu nza (nī Nzisa).
Mueni give-CAUS-APP-PASS-FV child food outside (by Nzisa).
Mueni has been made (by Nzisa to give the child food while outside).
This structural pattern can be described as:

Valency Structure 1223: Subject + V + Object + Object + Objoid.

The causative-applicative-passive derived verb is tetravalent or $V^4$.

The verbs in the intransitive/transitive category also take these three affixes as in (158) and (159) below:

(158) (a) Mũsũmbĩ nĩwain-ĩth-ĩ-w'-a syana (nĩ mwalimũ).
King sing -CAUS-APP-PASS-FV children (by teacher).
The children have been made (by the teacher) to sing for the benefit of the king.

(b) Nĩkwain-ĩth-ĩ-w'-a mũsũmbĩ syana (nĩ mwalimũ).
There sing -CAUS-APP-PASS-FV - king children (by teacher).
There has been made children to sing for the benefit of the king (by the teacher).

(159) (a) Mũsũmbĩ nĩwain-ĩth-ĩ-w'-a syana wathi (nĩ mwalimũ).
King sing -CAUS-APP-PASS-FV children song (by teacher).
The children have been made to sing a song for the benefit of the king (by the teacher).

(b) Nĩkwain-ĩth-ĩ-w'-a mũsũmbĩ syana wathi (nĩ mwalimũ).
There sing -CAUS-APP-PASS-FV king children song (by teacher).
There has been made children to sing a song for the benefit of the king (by the teacher).
In (158) the verb has been used intransitively and it falls into two valency structures:

(a) Valency Structure 12: Subject + V + Object.
(b) Valency Structure 022: Ø + V + Object + Object.

The causative-applicative-passive derived verb is divalent or $V^2$.

In (159) the verb has been used transitively and it also falls into two valency structures:

a) Valency structure 122: Subject + V + Object + Object.
b) Valency Structure 0222: Ø + V + Object + Object + Object.

The causative applicative passive derived verb is trivalent or $V^3$.

In (158) and (159) the elaborator mūsumbī 'king' which occupies the subject position is a beneficiary introduced by the applied affix.

Hence the effect of the three affixes on the valency of the basic verb can be expressed as:

\[
\begin{align*}
X^{n+\text{APP}} &= X^{n+1} \\
X^{n+\text{CAUS}} &= X^{n+1} \\
X^{n+\text{PASS}} &= X^{n-1} \\
X^{n+\text{CAUS}+\text{APP}+\text{PASS}} &= X^{n+1}
\end{align*}
\]
We notice that when the applied affix introduces an elaborator which has the semantic role of beneficiary it occupies the subject position while elaborators with the semantic roles of locative or motive occur after the verb.

The observations made in the section on co-occurrence of the affixes are summarised in Table 5 below:

**TABLE 5: A Summary of the Effects of the Co-occurrence of the Affixes on the Valency of the Basic Verb.**

<table>
<thead>
<tr>
<th>VERB CATEGORIES</th>
<th>VALENCY OF THE BASIC AND DERIVED VERBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero-valent</td>
<td>$V^0$ - - - - - -</td>
</tr>
<tr>
<td>Intransitive</td>
<td>$V^1/V^2$ $V^3/V^4$ - $V^1/V^2$ $V^1/V^2$ $V^1/V^1$ $V^1/V^2$ $V^2/V^3$</td>
</tr>
<tr>
<td>Intransitive/Transitive</td>
<td>$V^1/V^2$ $V^3/V^1$ - $V^1/V^2$ $V^1/V^2$ $V^1/V^1$ $V^1/V^2$ $V^2/V^3$</td>
</tr>
<tr>
<td>Transitive</td>
<td>$V^2$ $V^3$ - $V^2$ $V^2$ $V^1$ $V^2$ $V^3$</td>
</tr>
<tr>
<td>Monotransitive</td>
<td>$V^3$ $V^3$ - $V^3$ $V^3$ $V^3$ $V^3$ $V^3$</td>
</tr>
<tr>
<td>Ditransitive</td>
<td>$V^3$ $V^3$ - $V^3$ $V^3$ $V^3$ $V^3$ $V^3$</td>
</tr>
</tbody>
</table>

Note: *When causative and stative affixes occur together in $V^v$ verbs, the stative affix reduces the resulting $V^3$ verb to $V^1$.  

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4.3 Conclusion

When the basic verbs are derived by the doubling of the affixes it is only the applicative affix which is productive and it produces the valency groups: Divalent, trivalent, tetravalent, pentavalent and hexavalent. This applicative affix not only doubles but also trebles. The other three affixes i.e. the causative, the stative and the passive do not double. This is due to some restrictions in Kikamba that:

i) All clause constructions in the language have only one agent which can only be reduced once.

ii) The causative affix only introduces an elaborator which is a causer and has the semantic role of agent.

In the co-occurrence of the affixes, the applicative and the passive are the most productive since they can occur with all the categories of basic verbs except the zero-valent. The stative affix is the most restricted. Co-occurrence of the affixes produces derived verbs that fall into the valency groups: Monovalent, divalent, trivalent and tetravalent. We notice that while the valency increasing affixes can co-occur, the valency reducing affixes cannot co-occur. This is due to
a restriction in Kikamba that the valency of a basic verb can be increased twice but cannot be reduced twice.
CHAPTER FIVE

SUMMARY AND CONCLUSIONS

5.0. Introduction

This study sought to examine the valency of the Kikamba verb. It concerned itself with the number of obligatory elaborators that accompany the Kikamba verb in clause structure. The data for this study which comprises verbs, was collected from written texts: a Kikamba story book and the Kikamba Bible. Using these verbs, sentences were constructed which were used to determine the valency of the verb. Allerton's 1982 model for analysing verb valency was used for the analysis of data.

5.1. Findings and Implications

This study had the following findings:

(i) The valency of the basic verb is closely related to its transitivity i.e one can predict the valency of the basic verb from its transitivity status. For example, intransitive verbs with no elaborator are zero-valent, intransitive verbs with one elaborator are monovalent, transitive verbs with two elaborators are
divalent while transitive verbs with three elaborators are trivalent.

(ii) Derived verbs with the applicative and the causative affixes are one valency higher than the basic verb while verbs derived with the passive and the stative affixes are one valency lower than the basic verb.

(iii) The valency increasing affixes occur together in one verb while the valency reducing affixes do not. The valency of the Kikamba verb can be increased twice but it cannot be reduced twice even when the basic valency is three. A restriction in Kikamba disallows double reduction.

(iv) Of the four affixes used in this study, only the applied affix could double or even treble in one verb. This is because it introduces elaborators with different semantic roles such as beneficiary, motive, locative, possessor etc. This affix is therefore the most productive in Kikamba.

(v) When a basic intransitive verb with an optional Locative NP is derived using the valency increasing affixes, the Locative NP becomes obligatory.
(vi) Zero-valent affixes do not pattern with the valency reducing affixes. This is because valency cannot be reduced below zero. These verbs only pattern with two applied affixes and the resulting derived verb is accompanied by a cognate elaborator which is obligatory and occupies the position.

(vii) The stative affix is the most restricted of the affixes examined since it only takes divalent verbs as input.

(viii) Derived verbs fall in the following valency categories: zero-valent, monovalent, divalent, trivalent, tetravalent, pentavalent and hexavalent.

(ix) All the other affixes except the passive and the stative could co-occur. Three affixes i.e the applicative, the passive and the causative could occur together in one verb.

(x) When causative and stative affixes occur together in divalent verbs, the stative affix reduces the resulting trivalent verb to monovalent. This happens because the stative affix takes only divalent verbs as input.

The findings of this study have implications for researchers interested particularly in Kikamba and in Bantu linguistics. The verbs collected
as data for this research form useful data for linguists carrying out a research in contrastive linguistics. The data also forms useful corpora for any one interested in studying another aspect of the verb in Kikamba. This is because the verbs collected in this study are a cross section of all the verbs and verb categories found in the language.

5.2 Areas For Further Related Research

This study focused only on the valency of the Kikamba verb. However, from our reading, it is clear that other classes of words such as nouns, adverbs, adjectives, prepositions and the like have their valency too. Thus further research is needed to examine the number of elaborators these other elements need to pattern with.

This study only concentrated on Kikamba and did not make a comparison with any other Bantu language. Research on the valency of the verb in another Bantu language would complement the findings of this study by establishing whether the same number of elaborators are needed by the verb in clause structure.

Finally, this study only considered the applicative, the causative, the stative and the passive affixes and their effect on verb valency and left
out other verbal extensions such as the reflexive, the reciprocal and the conversive. Therefore, further research is needed to show the effect of these affixes on the valency of the basic verb. This study can be carried out on Kikamba or on another Bantu language.

5.3 Conclusion

The findings of this study show that the valency of the basic verb in Kikamba is closely related to its transitivity. The study also affirmed that the valency of the basic verb can be reduced or increased by the use of verbal extensions. It also observes that the applicative affix is the most productive of all the four affixes used.
BIBLIOGRAPHY


APPENDIX

A list of the verb roots from which the data sample was drawn.

<table>
<thead>
<tr>
<th>Verb root</th>
<th>Gloss</th>
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<tbody>
<tr>
<td>1. u-</td>
<td>rain</td>
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<tr>
<td>2. uluk-</td>
<td>fly</td>
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<tr>
<td>3. kom-</td>
<td>sleep</td>
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<tr>
<td>4. kun-</td>
<td>beat</td>
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<td>5. neng-</td>
<td>give</td>
</tr>
<tr>
<td>6. lilikan-</td>
<td>remember</td>
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<td>7. um-</td>
<td>bite</td>
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<td>8. ek-</td>
<td>forgive</td>
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<td>9. i-</td>
<td>cry</td>
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<td>10. thumu-</td>
<td>rest</td>
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<tr>
<td>11. thukum-</td>
<td>work</td>
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<td>12. end-</td>
<td>go</td>
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<td>13. vaiuk-</td>
<td>fall</td>
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<tr>
<td>14. ungam-</td>
<td>stand</td>
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<td>15. kum-</td>
<td>bark</td>
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<td>16. thek-</td>
<td>laugh</td>
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<td>17. manth-</td>
<td>search for</td>
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<td>18. tham-</td>
<td>migrate</td>
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<td>19. in-</td>
<td>sing</td>
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<td>20. voy-</td>
<td>pray</td>
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<td>21. sem-</td>
<td>run</td>
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<td>No.</td>
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<td>22.</td>
<td>ïky-</td>
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<td>andïk-</td>
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<td>ua-</td>
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<td>sisy-</td>
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<td>athim-</td>
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<td>thaitth</td>
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<td>kw’-</td>
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<td>ambïï-</td>
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<td>ïw’-</td>
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<td>46.</td>
<td>sungï-</td>
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<td>47.</td>
<td>vingilit-</td>
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</tbody>
</table>
48. ukīl-  rise
49. men-  hate
50. vū-  clean
51. thesy-  wash
52. ath-  shoot
53. vīvy-  burn
54. wīl-  come across
55. thīnz-  slaughter
56. ketee-  stare
57. ūmūsy-  bear
58. sumbīk-  rule
59. vith-  hide
60. tethy-  help
61. vonoky-  rescue
62. ongel-  add
63. keng-  cheat
64. vūthy-  mock
65. tongosy-  lead
66. neen-  speak
67. vwīk-  cover
68. atū-  slice
69. vyūvy-  warm
70. ītaan-  rescue
71. anakavy-  decorate
72. tūǐːː-  jump
73. mely-  swallow
74. umaal-           go out, go
75. tulul-           pour
76. y-               eat
77. suvī-            take care
78. silīl-           judge
79. twa-             take
80. luut-            push
81. oloot-           point at
82. vuky-            defile
83. tavani-          tell
84. vulani-          mix
85. īt-              call
86. īt-              strangle
87. īlīl-            place on
88. min-             finish
89. kulūl-           draw
90. syok-            return
91. īūkīl-           believe/agree
92. kananī-          argue
93. ti-              leave
94. tangī-           save
95. ving-            close
96. kany'-           warn
97. angang-          wander
98. vuly-            snatch
99. ki-              fear
100. kwat- hold/catch
101. many- know
102. tat- try/tempt
103. ëa- give instructions
104. saluky- open eyes
105. anang- destroy/spoil
106. tandðhy- trade
107. ëkû- believe
108. kathi'- praise
109. til- cut
110. siì- block
111. ing- drive
112. minz- sprinkle
113. ony'- show
114. seuvy- make
115. vyuly- swing
116. ambat- ascend
117. thee- descend
118. thelekely- vanish
119. akan- light
120 vavat- feel
121. umîl- appear
122. veny'- blink
123. isily- think
124. nyauny move
125. theûk- boil
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<tr>
<th></th>
<th>126. tw'īk-</th>
<th>become</th>
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<td>127. thayūūık-</td>
<td>reßurect</td>
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<td>128. suanĩ-</td>
<td>think</td>
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<td></td>
<td>129. thilik-</td>
<td>get annoyed</td>
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<td>130. aĩk-</td>
<td>circumcise</td>
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<td>131. ūnyivy-</td>
<td>submit</td>
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<td>132. thĩn-</td>
<td>suffer</td>
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<td>133. tan-</td>
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<td>134. thūlūmũk-</td>
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<td>141. kwatĩl-</td>
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<td>143. kandi-</td>
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<td>148. thi-</td>
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<td></td>
<td>149. thi-</td>
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<td></td>
<td>150. ūthukĩsỹ-</td>
<td>listen</td>
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<td></td>
<td>151. kunikĩ-</td>
<td>peep</td>
</tr>
</tbody>
</table>
152. u- cook
153. umb- mould
154. thengee- get closer
155. ku- carry
156. kū- uproot
157. kim- hit
158. ũkîly- lift
159. lûng- direct
160. eteeel- wait
161. thingith- shake
162. kusy- pull
163. inuk- go home
164. eud- like
165. kily- keep quiet
166. ta- advise
167. le- refuse
168. ingîvy- increase
169. tony- pierce
170. umy- remove
171. ũthîw- be
172. athûk- give way
173. lîs- climb
174. amûk- wake up
175. os- take
176. a- share
177. tw'- pick
178. lūm-
179. nyivy-
180. vak-
181. vĩfì-
182. twaw-
183. kĩ-
184. oveesy-
185. um-
186. that-
187. tũng-
188. vet-
189. endeesy-
190. lũmy-
191. tilang-
192. tũlik-
193. mumuny-
194. ṭlaan-
195. ìlooel-
196. thik-
197. kũly-
198. sol-
199. tindilũk-
200. ũkal-

**stick**
**decrease**
**smear**
**miss**
**be accompanied**
**jump**
**way lay**
**insult**
**be angry**
**return**
**keep aside**
**please**
**hold firmly**
**cut into pieces**
**break**
**suck**
**rescue**
**watch**
**bury**
**ask**
**draw**
**skid**
**stay**

**Note:** To form the simplest word from the above verb roots, we need to add the final Bantu vowel –a/e.